



## *RE-DRAWING THE THIN BLUE LINE*

Re-configuring the public interface of the Delft Police Station

*André le Roux*

This dissertation of the degree of Master of Architecture (Professional)

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**Re-drawing the thin blue line** - Re-configuring the public interface  
of the Delft Police Station

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This dissertation is presented as part fulfilment of the degree of Master  
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Date: 06 November 2017

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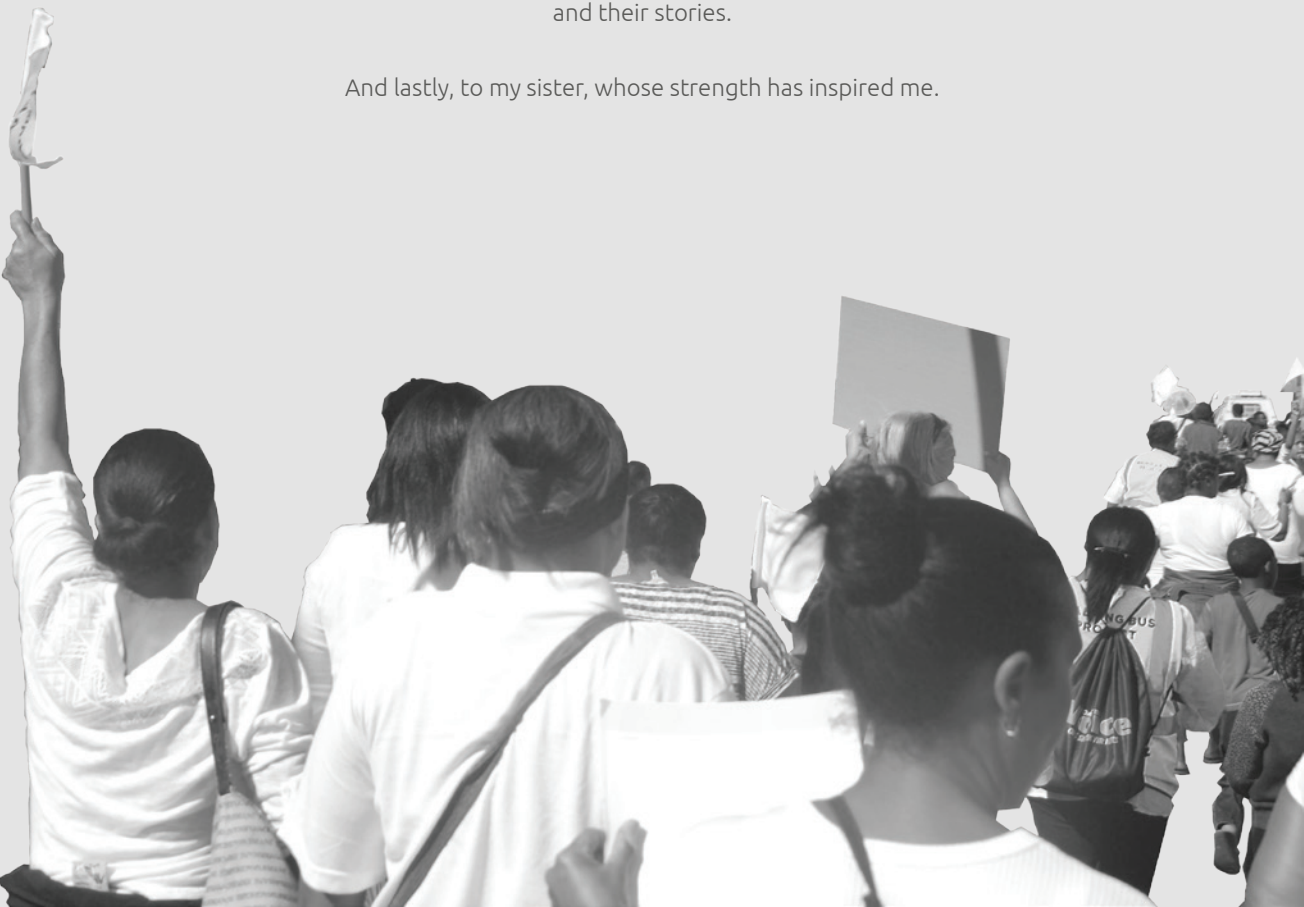
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And lastly, to my sister, whose strength has inspired me.



## ABSTRACT

This dissertation has two departure points: the social phenomena of crime, particularly in Delft, and a concern with the character of institutional buildings, particularly in 'township' areas. These two departure points intersect in an interrogation of the police station as an architectural type, particularly the Delft Police Station.

The police are often referred to as the 'thin blue line', suggesting an agency that delicately differentiates between the community and criminal activity. The apartheid era has left this line thickened and its effects are still felt in the buildings that it left behind, despite the shift from a police *force* to a police *service*, post-1994.

This dissertation hopes to reconfigure this line in both; a physical way, through built form but also a social way, using mixture of programme. To produce a building that encourages interaction with the vibrant community, Delft.



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## SECTION 1 - INTRODUCTION

As can be expected in a place where there is a large concentration of people, Delft is a place of friction. While this friction causes conflicts, it has also allowed for the growth of opportunities. This concentration has produced a vibrant community which has captivated the studio's research enquiry.

This dissertation has two departure points: the social phenomena of crime (particularly, the elevated levels of crime in Delft), and a concern with the character of institutional buildings (particularly in 'township' areas). These are often suburban in character and fenced off, denying the opportunity of positive interaction with the street. These two departure points intersect in an interrogation of the police station as an architectural type.

The police are often referred to as the 'thin blue line', suggesting an agency that delicately differentiates between the community and criminal activity. During the apartheid period this line thickened considerably, creating an impenetrable buffer between the community and police. Notwithstanding the policy shift that has taken place post 1994 within the sphere of safety and security – from apartheid police force, to the newly conceived police service, the thick blue line is still found in many police stations.

The Delft Police Station was built in the 1980s at the height of the major tensions between the police and people in the townships, and so has its roots in apartheid legacy and thinking. This dissertation therefore explores how the architecture of the Delft police station might be re-imagined after apartheid. The dissertation asks how architecture can contribute to reducing crime in Delft, both by improving the efficiency of police operations, as well as by brokering a better relationship between the police and the community they are intended to serve. How can the blue line be reconfigured to provide a better interface between the residents of Delft and the police? This reworking of the blue line involves not only re-imagining the boundary condition and threshold between the police station and the street, but additional strategies of creating a more inclusive crime prevention approach. The newly configured building therefore provides accommodation for the neighbourhood watch, facilities for the community policing forum, as well as additional programme such as dance, music and art spaces for the youth. It is intended to make the police station an attractive destination for residents rather than a place of fear, criminality and trauma. The proposed intervention utilises some of the existing buildings on the site - rather than starting from a clean slate – to explicitly demonstrate that transformation has taken place.



Figure 1 The current Delft Police Station



## LOCATING THE DISCONNECTION WITH THE POLICE AND THE COMMUNITY

This dissertation is made up of four sections. The first section locates the dissertation within the incredibly complex issue by building an understanding of the state of the current normative crime prevention service, namely the SAPS. This section looks at how the issue finds life in Delft. The second section looks at the methodology that was adopted to locate this dissertation's spatial findings into the context of Delft, specifically on the Delft Police Station. The third section explores the site and analyses the current building. Finally, the last section investigates how the spatial findings and lessons learnt in Delft can be mobilised in re-imagining a more community-orientated police station.



Figure 2 The current Delft Police Station fencing and Detective offices.

Safety and Security is the government term that refers to combatting, investigating and, with the most contention, preventing crime.<sup>1</sup> This echoes the situation in the United States of America, which is also plagued by elevated levels of crime. The solution to the problems of crime, however, are complex. According to Oscar Newman in his book *Defensible Space*, “*The crime problems facing America will not be answered through increased police force or firepower. We are witnessing a breakdown of the social mechanisms that once kept crime in check and gave direction and support to police activity*”<sup>2</sup>

<sup>1</sup>The Constitutional Assembly, 1996, Constitution for the Republic of South Africa

<sup>2</sup>Newman, Oscar. 1972. *Defensible Space - People and Design in the Violent City*, p1

Similar findings are reflected in the “Pikoli” Report. An investigation of policing in Khayelitsha revealed that in the post-1994 South Africa, there is a major disconnect between the police and the people who they serve. This applies to many police stations, including the Delft Police Station. The report uncovered a deep community call for police accountability, accessibility and transparency. This is a result of the lack of cases which had been followed-through, as well as the ability to track the progress and the almost impossible “mandate”<sup>3</sup> of crime prevention that has been passed on to the SAPS in the Constitution of the Republic of South Africa. According to David Bayley in his book, *Police of the Future*, “*The police do not prevent crime. This is one of the best kept secrets of modern life. Experts know it, the police know it, but the public does not know it. Yet the police pretend that they are society’s best defence against crime and continually argue that they if they are given more resources, especially personnel, they will be able to protect communities against crime. This is a myth.*”<sup>4</sup>

<sup>3</sup>Major-General Jeremy Vearey (SAPS), at the book launch for *Police Work and Identity*, 26 October 2017

<sup>4</sup>Bayley, David H. 1994. *Police for the Future*, p3

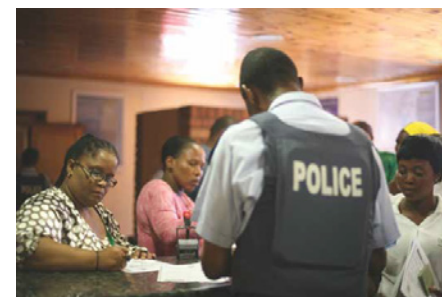


Figure 3 Community Service Centre, Harare police station. Yasser Booley



Figure 4 Police dockets awaiting review, Khayelitsha Site B. Yasser Booley

<sup>5</sup> Faull, Andrew, 2017  
Police Work and  
Identity: A South African  
Ethnography, p73

The creation and upholding of this myth has caused a deception in the SAPS themselves and, most importantly, the community who they serve. Thus, according to Andrew Faull's book *Police Work and Identity*, has *"an organisational façade of efficiency and effectiveness"*<sup>5</sup> been maintained to uphold this myth. Similar practices have been taking place to safeguard the South African Police Service (SAPS) reputation within communities. The focus appears less to be on the communities that they serve and more on a national view of the stations and officers.

The focus on the first two objectives laid out in the Constitution - *crime combatting* and *investigation* has been shifted to crime prevention strategies geared towards enlisting the help of the local community in the fight against crime. This has been articulated by Sydney Mafumadi in the 1998 White Paper on Safety and Security: *"In the immediate post-1994 period, the government's policy agenda on safety and security was shaped by two objectives: firstly, to rehabilitate the police to ensure they became protectors of our communities; and secondly, to mobilise our people to participate in the provision of safety and security."*<sup>6</sup>

<sup>6</sup> Mufamadi, Sydney.  
1998. "Foreword." In  
White Paper on Safety  
and Security - 1998, p273

Hence the shift in 1994 for the police becoming a service. Although this suggested a radical new perception of policing, historic residues remained because of pragmatic requirements to retain many personnel from the existing civil service<sup>7</sup>. For crime theorist Leggett this was a problematic move, which could account for the ongoing troubled relationships between community and police: *"To expect a civil service, partly comprised of those who were trained under a fundamentally different regime and part of whom were new to the job altogether, to absorb complex new ways of doing business without significant training seems ludicrous."*<sup>8</sup>

<sup>7</sup> Leggett, Ted. 2003.  
What do police  
do? - Performance  
measurement and the  
SAPS, p1

<sup>8</sup> Ibid

South Africa has one of the biggest police services in the world with 200 000 personnel<sup>9</sup>, yet notwithstanding these numbers has been ineffective in fighting elevated levels of crime. This highlights the deep systemic social issues confronting current policing in South Africa. This poses an interesting question: what role can architecture play in this situation? How can the architecture of the police station express this process of rehabilitation, inviting community members to be involved in the process of policing? Can architecture be mobilised to create a better connection between people and police?

<sup>9</sup> Faull, Andrew, 2017  
Police Work and  
Identity: A South African  
Ethnography, p17

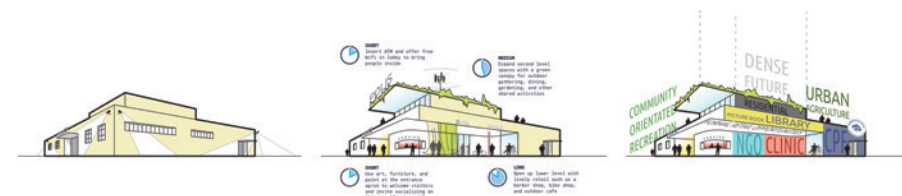


Figure 5 Early Provocation , utilising sponsoring thoughts from Studio Gang proposal in Philadelphia ,America.



Figure 6 Youth and police in Tokoza, 1991. Graeme Williams



# DELFT



Figure 7 Delft Demographics. SOGH Studio

Delft is a low-income neighbourhood 30km from the Cape Town city centre and positioned near the airport. Although planned in 1989, on the eve of the first democratic elections, as the first post-apartheid, non-racial suburb, it still presents itself as an enclave, with planning dating back to 1967. The demographics (from the 2011 census) shows an almost 50/50 split between black African and coloured people, with 60% unemployment and an average household income of R800-R6000 per month.

Like many low-income neighbourhoods, the government investment is mostly in the provision of RDP houses, which have been incrementally expanded over time, and secondly, in the construction of primary and high schools. Other institutions are very limited; there are two libraries, 2 clinics and one police station. There are many pockets of underdeveloped open land across Delft, that either get used for dumping or as gang shooting fields.

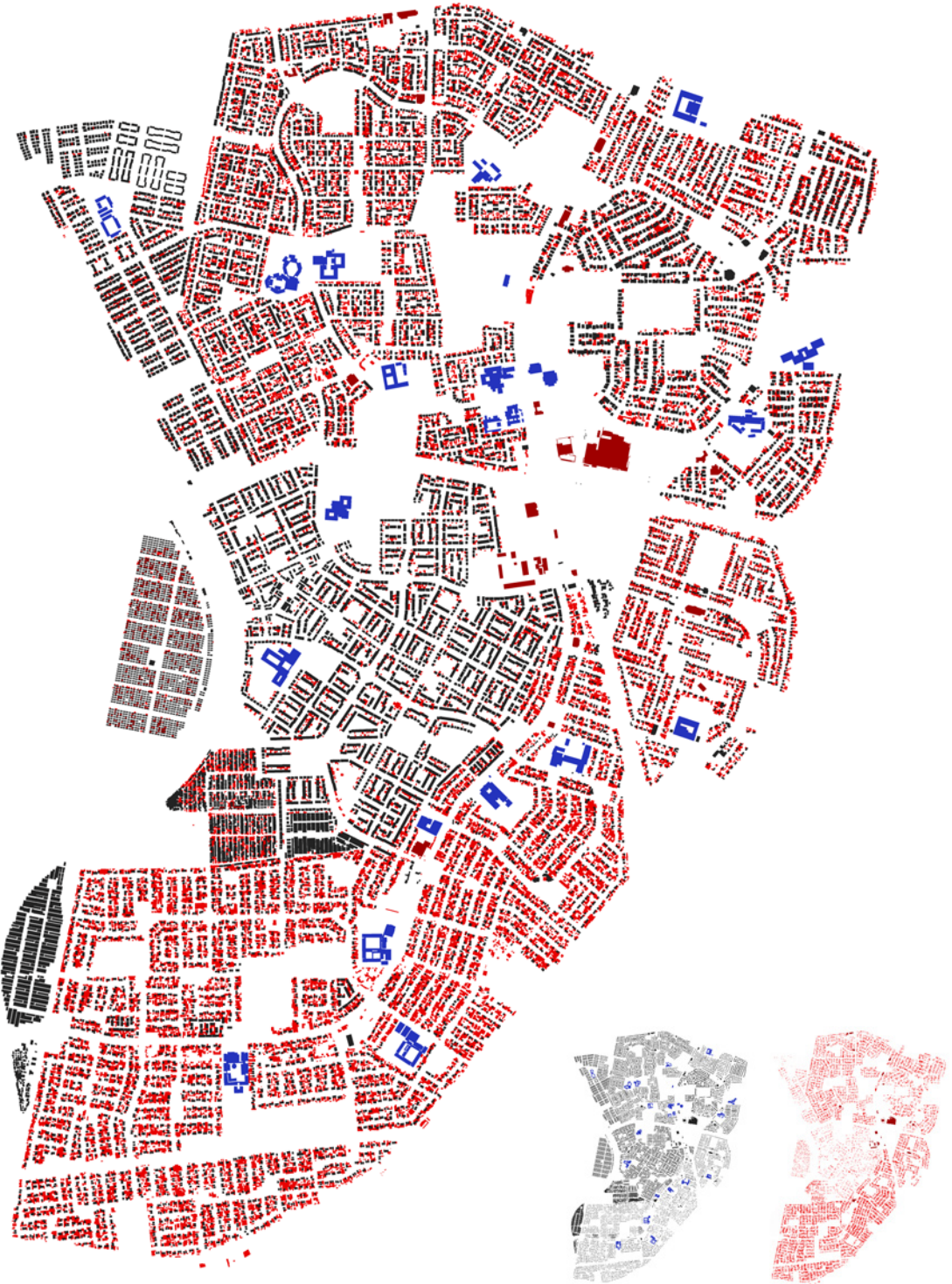


Figure 8 Provided in black and blue compared to the private initiatives in red. SOGH Studio

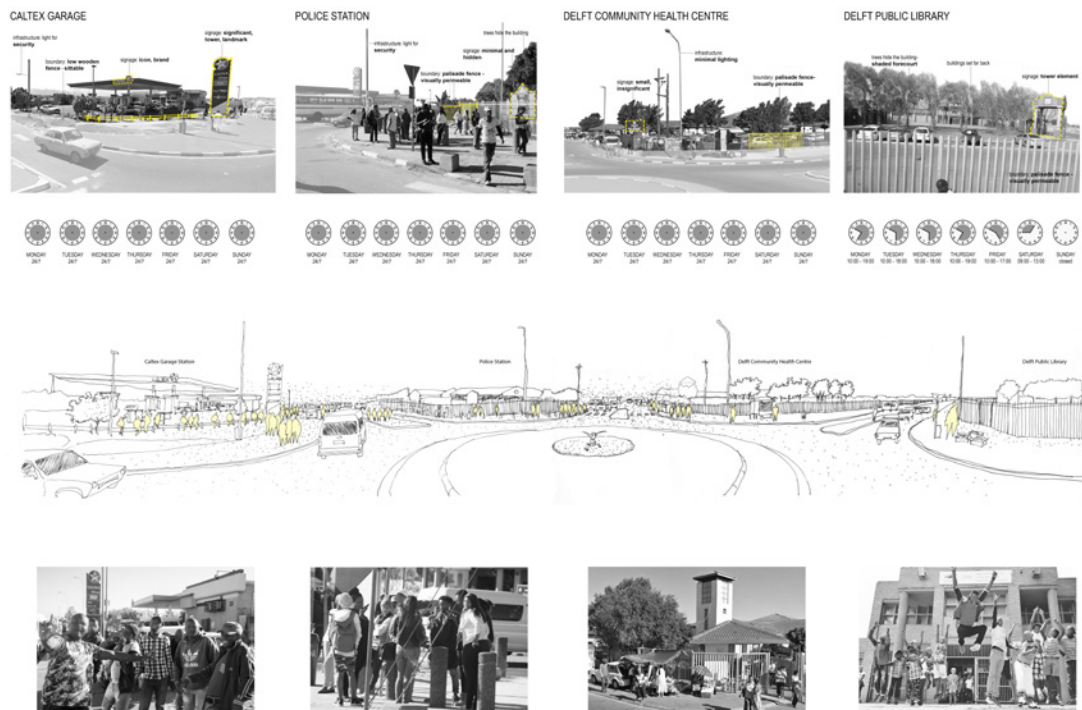


Figure 9 Delft Demographics. SOGH Studio



Figure 10 Delft Demographics. SOGH Studio

The planning of Delft is centred along a main road and loop roads that form neighbourhood cells. Delft Main Road acts as a link between Khayelitsha and Belville and limited provision of public transport gives life to a bustling taxi industry. Institutional clusters are positioned on major intersections along Delft Main Road. The public realm is made up 3 types of spaces: open space, the road network and public institutions. The road and open space networks produce a fluid public space network that produces many of the opportunities found in Delft. The institutions sit outside of this network. This is attributed to two main characteristics; the buildings are often placed in the middle of the plot with either unprogrammed open space or parking around it; the second characteristic is that fences with very few entrances surround the erfs. The limited operational times adds an additional disconnect to the public space network.

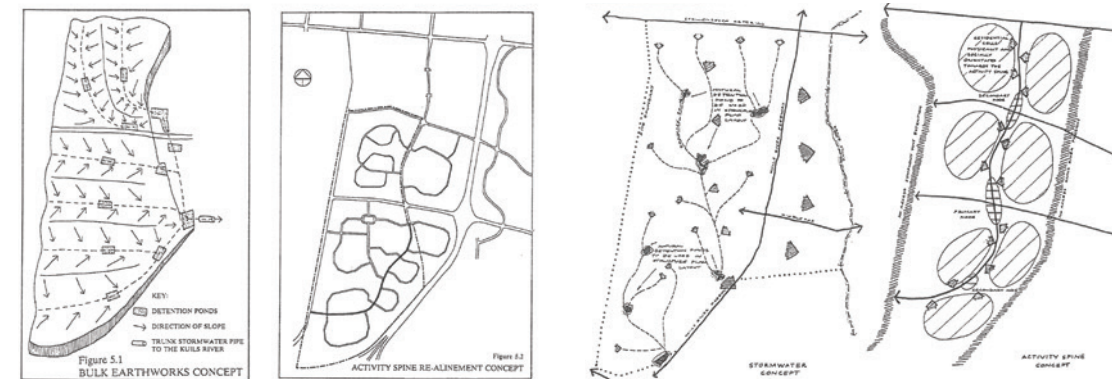


Figure 11 Planner's drawings of Delft. SOGH Studio



The gaps that have been left by government provision have been filled by communities and individuals with interventions, as they present various economic benefits to the individuals who construct them. These interventions are in a constant state of construction and fill in gaps; accommodation, where plots are filled and densified (to a point), providing housing for an additional 2 to 10 households. Social institutions, like mosques and churches (of various scale), have provided a multitude of additional programmes for the public. These include crèches, soup kitchens, homework spaces and some recreational activities. Retail is the clearest economic benefit to an individual, and there is a plethora of retail that has popped up in Delft, from services that rely on the allure of the Main Road to businesses that rely on a scattered strategy. Yet the institutions remain largely untouched by these interventions. Therefore, this dissertation will be looking at the institutional quality present in Delft, particularly the police station by intervening in the interface between the community and the police.



Figure 12 Taxi drivers in the civic node

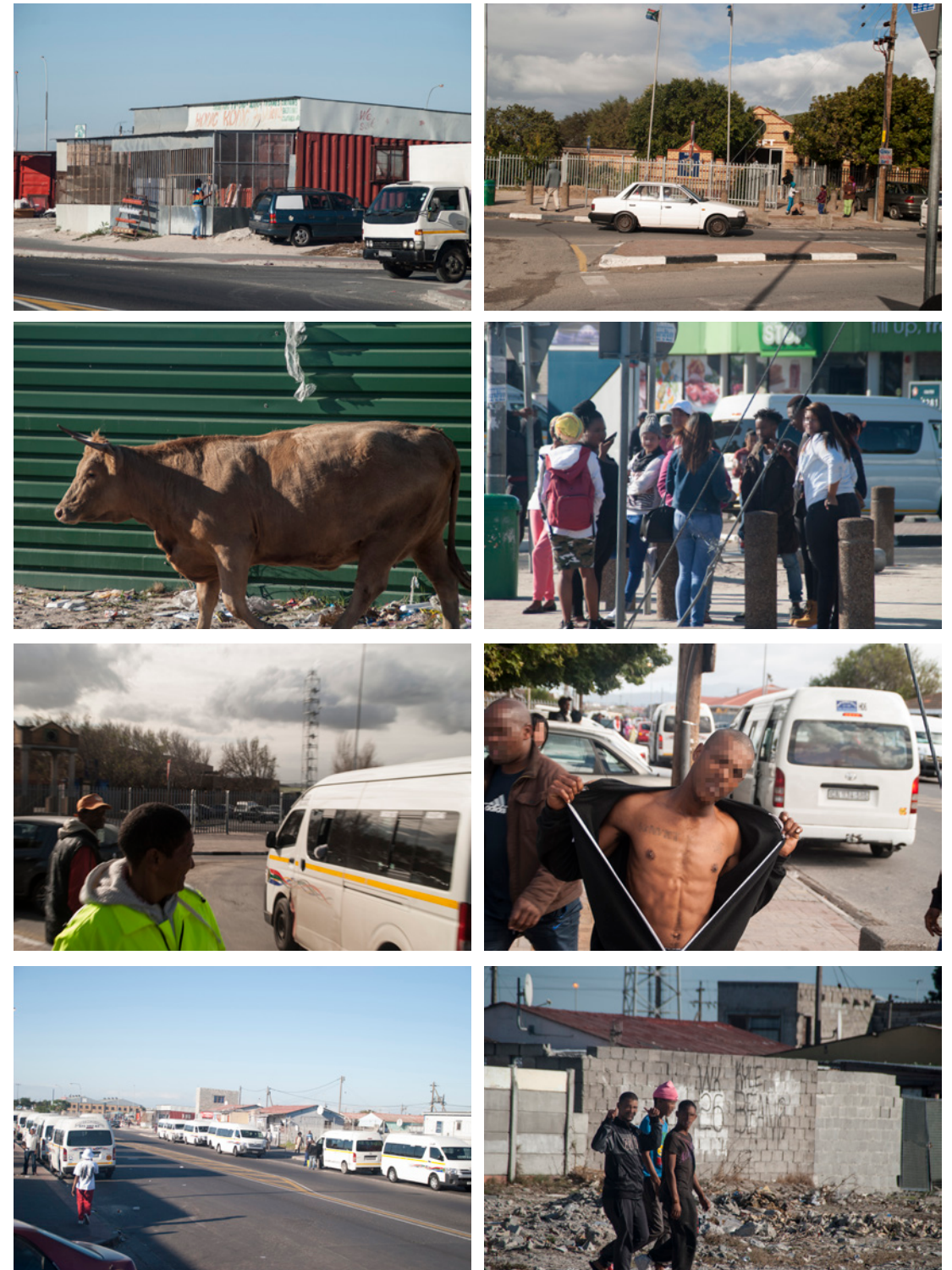


Figure 13 Life in the civic node



## SECTION 2 – PROCESS

### DELFT LIVES MATTER

Crime has an overwhelmingly negative influence on the youth in Delft. This was demonstrated in a seminar called #Delftlivesmatter hosted by Sustainable Livelihoods Foundation, from which they published: *What we live with everyday is not right – Partnerships for accountability and safer cities in South Africa* (2017). This seminar consisted of narrative based research that focused on the stories and experiences of people living in Delft, (most of which being young adults). The main finding from the proceedings was that the police need to be more accountable to the community in which they serve. It became clear that the police in Delft were feared more than the gangsters in some cases. Yet there was still a powerful need for the police to step up to their responsibilities. This requirement was reflected in the list of demands compiled by those living in Delft, in which the call for more police stations was made. In addition to this demand, residents desired youth-focused and youth-led developments

### DELFT PEACE MARCH

After establishing contact with neighbourhood watch members, I was invited to attend a peace march. This march happened a few days after the March taxi turf war that saw many drivers killed, as well as caused the shut-down of Delft Main Road. Last August (2016) saw a major gang turf war that resulted in the deaths of 31 people over 31 days. These two rough periods sparked a major mobilisation of people, mainly angry women and their children, into a march the length of the Main Road from Roosendaal High School to the Delft Police Station.

As I stood as an observer on one of the circles along Main Road, I could feel the anger that the women felt in the cracking of their voices while shouting: “Stop the Violence! Stop the Taxi Violence!” As the day progressed, more people joined the circle parties and eventually we marched down to the police station. We regrouped at the circle outside the police station, causing traffic to slow to a standstill.

The experience highlighted a frustration about the lack of leadership and accountability within the community. A Delft Peace Initiative was formed after that march, a positive initiative in which I decided to play a role. Since its inception and implementation, there have been a few positive, community run initiatives that have sprung from it. These include a fête for Heritage Day for children, as well as a fund-raiser in which there was a drive for recyclables to make sellable goods through up-cycling. This initiative was initiated with the purpose of using the funds to form a community intervention to the issue of security

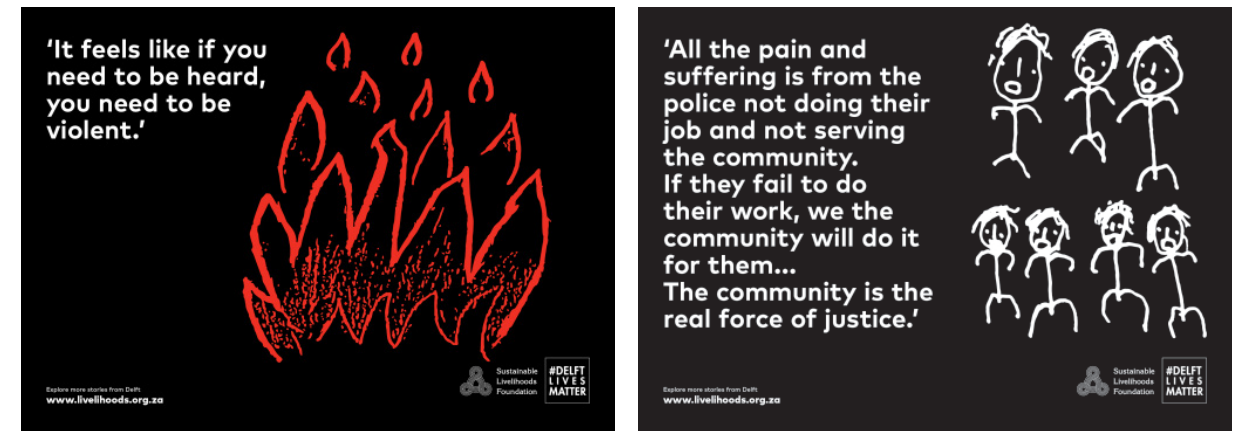


Figure 14 Posters from the #Delftlivesmatter seminar series. Sustainable Livelihoods Foundation



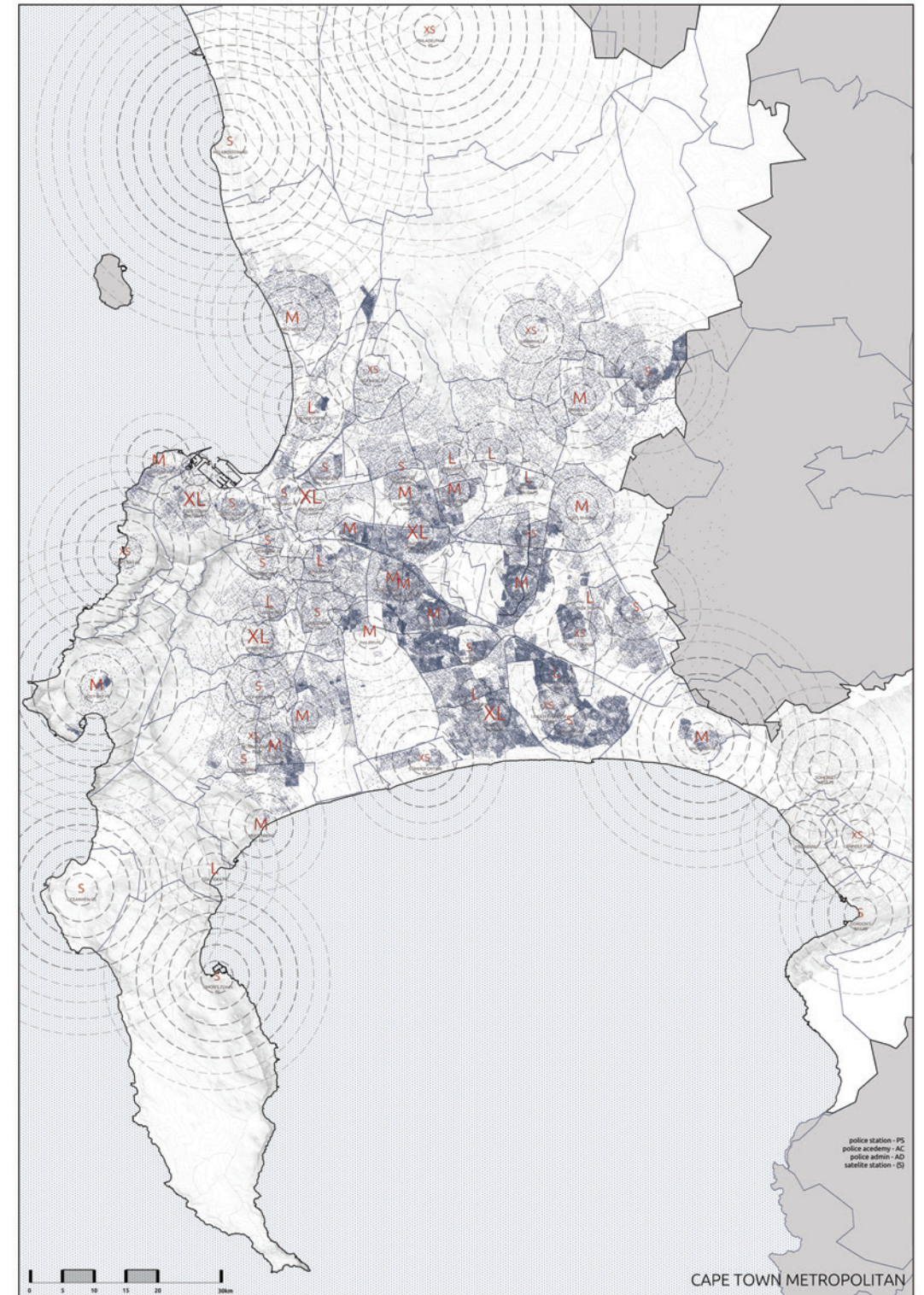
Figure 15 Photos from the Delft Peace March



## METROPOLITAN MAPPING

While youth called for more police stations in the #Delftlivesmatter seminar, I wondered: is this a true reflection of the state of police stations within, specifically, the Cape Town Metropolitan area? An investigation into the lack of police stations was conducted. Important to this exploration was establishing where the Delft Police Station sits within the Metropolitan context. This investigation uncovered the state of the police station in the post-1994 Cape Town Metropolitan context, which will be discussed further.

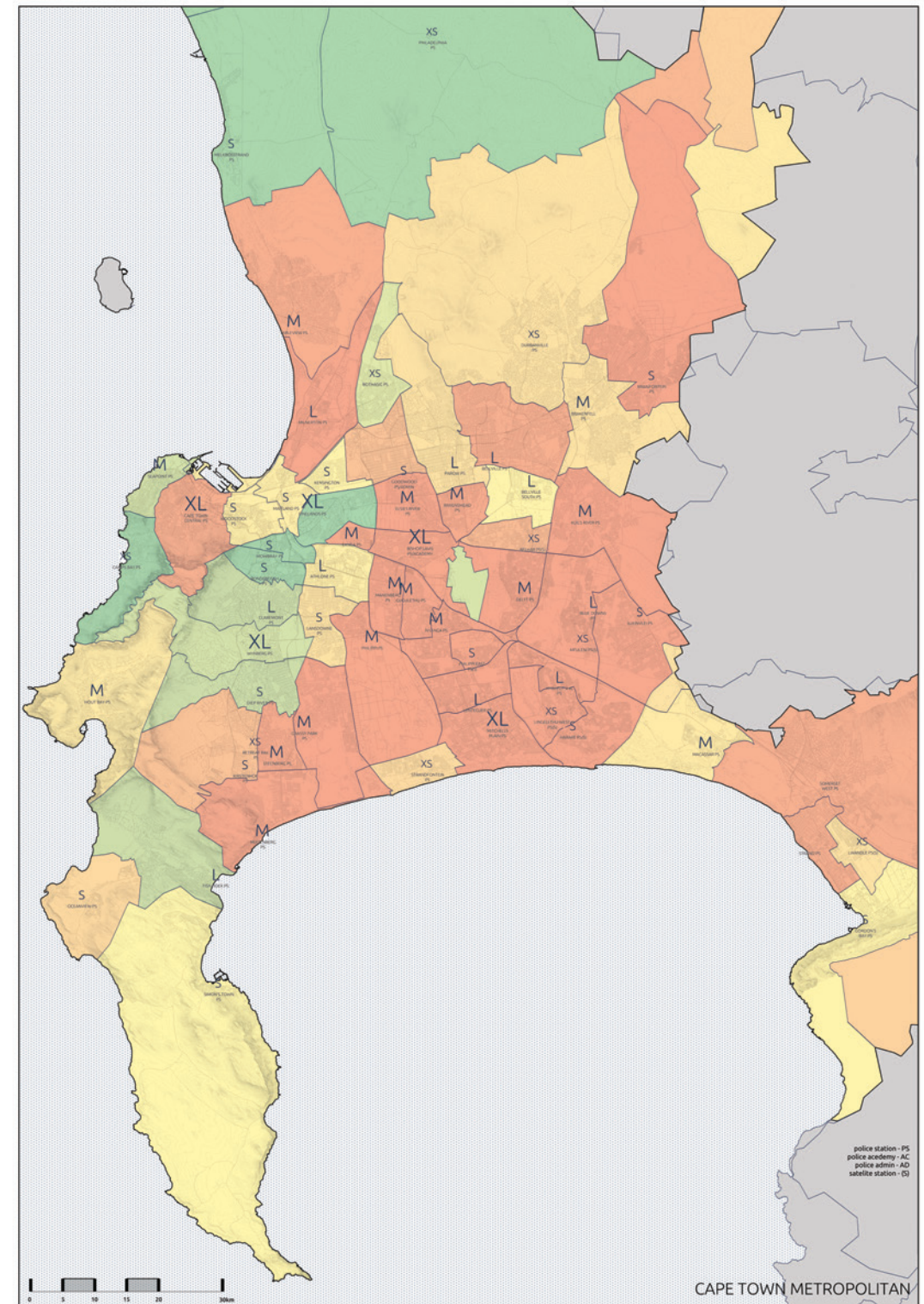
The first mapping exercise, *figure 16*, was produced to locate all the stations, their precinct boundary, radius of influence in 1km increments and their relative sizes within the study (this was based on coverage and number of floors). The map is overlaid with Adrian Firth's 2011, *Racial Distribution Dot Map*, which has been edited to show density rather than racial distribution, indicated by making the race colours all the same. This map shows the distribution of police infrastructure and the people they serve. It is clear that there is a slight concentration of infrastructure in the Cape Flats area which contains a large concentration of the Cape Town Metropolitan's population. However, is this the right distribution?



**Figure 16** Metropolitan map showing the size of the stations vs. the police boundaries, radius distance (per 1km) and density. This shows a concentration of people in the Cape Flats (Delft sitting close to the centre) as well as an unequal distribution of police infrastructure.



The next mapping exercise, *figure 17*, shows the crime through a heat map, based on police precinct stats from 2016. This map shows five types of crime: murder, attempted murder, residential burglary, sexual assault and vehicle theft. This is an overlay of the five maps to establish an average reading of the crime heat of the five categories. This map shows which areas are experiencing the most crime, and when seen in comparison to the previous mapping exercise, it shows that the police stations within the Cape Flats area are experiencing the most crime. It also potentially suggests that the stations aren't operating at their highest efficiency.



**Figure 17** Metropolitan map showing the size of the stations and the crime heat (based police precinct stats from 2016, showing 5 types of crime; Murder, Attempted Murder, Residential Burglary, Sexual Assault and Vehicle Theft. This is an overlay of the 5 maps). This map shows further unequal distribution of police infrastructure.

<sup>1</sup>Police Stats are based on reported crimes, therefore a debatable reference of a true reflection on crime.

## POLICE STATION CARDS

A further mapping exercise which contributes to the metropolitan study was to investigate the stations as pieces of architecture, and how they contribute towards the post-1994 policing idea of the new police *service* rather than the previous *force*. A brief analysis was conducted which looked at specific aspects of each of the 62 police stations in the metropolitan to gain a broad understanding of the architecture of the Cape Town police stations. The aspects looked at were: **legibility**, **civic-ness**, **contextuality**, **size**, **boundary treatment**, and **plot configuration**.

**Legibility** was established by simply asking: “Does it look like a police station?” Therefore, the legibility within the context was classified as legible or not. Police stations rely heavily on the normative signifier of signage (flags, sign boards and brown street signs). The first architectural element that is seen when approaching is usually the apartheid style guard house that stands empty as a reminder of the police and community friction in the 1980s. 14 of the 62 stations are illegible. This is attributed to: dense vegetation which obscures it, too much distance between fence and building, as well as nondescript architecture (where through its architecture, the building signifies anything from a house to a community hall).

The **civic-ness** of the building was established by asking two questions: “Is it clear that it is a public building?”, and “How does it then function as a public building?” Depending on the way the building functions and is interpreted, it is then classified as civic or non-civic. This is a question that runs throughout the dissertation, which investigates the characteristics of a good public building. It became clear that a significant percentage of the stations were established to encourage as little public built engagement as possible.

**Contextuality** was established by simply asking: “Does it fit within the context or not?”

The **size** clarification was established from the previous metropolitan mapping exercises.

The **boundary treatment** was looked at in terms of materiality to uncover and assess a material palette of police stations. This investigation highlighted the need for transparency in the boundary treatment, as in many cases the buildings themselves weren’t visible.



Figure 18 Normative police signifiers that have such have become so important in distinguishing normative police stations within their surroundings.



Through these investigations, it became clear that there aren't too few police stations, rather, there are too few police stations that are approachable. This investigation also showed that a large majority of police stations were built before and during the apartheid years, with little to no alterations post-1994. The architecture of the police station is about 30 years behind the current policing policy.

From this study, as well as looking at a few stations, more in-depth reading was achieved. The findings revealed that the current police stations are falling short in the following architectural areas:

### 1 – What is (un)seen.

The first area of investigation is **visual relationships**, which looks at boundary treatment, surveillance and legibility. The Crime Prevention through Environmental Design (CPTED) principles and others (Jane Jacobs, VPUU, etc.) talk about the need for passive surveillance or what is referred to as “eyes on the street”. Yet this idea neglects the possibility of the situation whereby the ones doing the watching are themselves being watched. Therefore, the idea of a visual relationship is developed where there is a two-way dialogue between the public and the users of the building.

The current police station building visual strategy is one of a bad fort. The walls are high yet there are little to no views in or out.

### 2 – What it does for the public. What it provides for the public.

The second area of investigation is **programme**, which looked at which spaces the police have provided for public use. It was found that the current police station programme is very limited and although the site is built-up, only a small sliver of it is providing a use to the public. The site supports the normative service provision at mostly a low density.

The programmes are: the community service centre (CSC)<sup>ii</sup> (this is the main interface of the current police station model and it's the space where you report crimes and get documents certified); and the victim support unit (VSU) (this includes a victim friendly room (VFR), a police counselling space for victims in a state of trauma).

<sup>ii</sup> These are terms used by the stations to describe their spaces sometimes only the abbreviations are used.



**Figure 19** This is the Pinelands Police Station (my local station) on the outskirts of Pinelands, built in the 1980s. This station illustrates the these two issues. The CSC desk is not seen from the outside, it is unclear if it has people inside.

The site is an extensive piece of land, and the only area for public is the area in white

### 3 – What it represents. How it presents itself.

The third area in which police stations fall short is **aesthetic**. This is not merely how the building looks, but more what it represents as an “index”. “Index” utilises Geoffrey Broadbent’s terminology in *A Plain Man’s Guide to the Theory of Signs in Architecture*, 1996, referring to the common memory or meaning of the police station. How has this index materialised in the current police station and does this align with the service goals in the post-1994 era of policing? Well the simple answer is that the aesthetics of these buildings do not align with the service goals post-1994: the face brick, hard exteriors speak to an unwillingness to interact with the public, a lingering signifier of the apartheid regime.

### 4 – How it responds. What it allows.

The last area in which police stations fall short is **civic-ness**: this is looking how police stations work as public buildings. This links back to the departure point of the singular character of institutions, particularly in low-income ‘township’ areas. This has roots in the previous three findings as they overlap with the police station not signifying itself a public building.

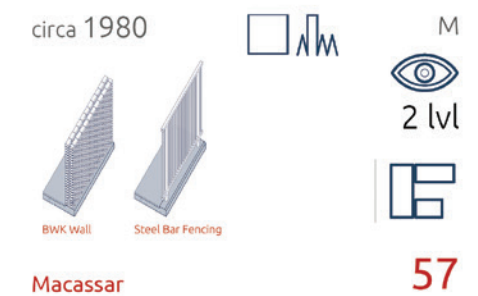
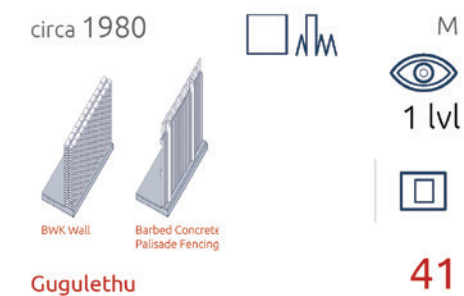


Figure 20 Two examples of police cards that present



## PRECEDENT STUDIES

By acknowledging the uninspiring nature of the police station card studies, a need for finding other design precedents emerged. All these precedents were chosen because they look at some aspect of the idea of a new configuration of a police interface. The projects range in context and size and will each be discussed in detail in the following chapter. The first study focuses on the *kôbans* of Tokyo that take on a spread-out typology and the buildings have a dedication to an approachable police service. This is achieved in interesting ways. Passage 56, based in Paris, is in a leftover space between two existing buildings, and creates a public building with very little intervention. In addition to these international studies, local examples such as Cape Town's Bonteheuwel Thusong Centre, is a collection of building programmes that all contribute to crime prevention by including a normative police station satellite. The fourth study is the VPUU Harare Intervention, which had a strategic impact within a crime-ridden area in Khayelitsha. Finally, I will be looking at the Retreat Rail Police Station, where the intention, like the intention of this dissertation, is to address the problems of police service delivery.

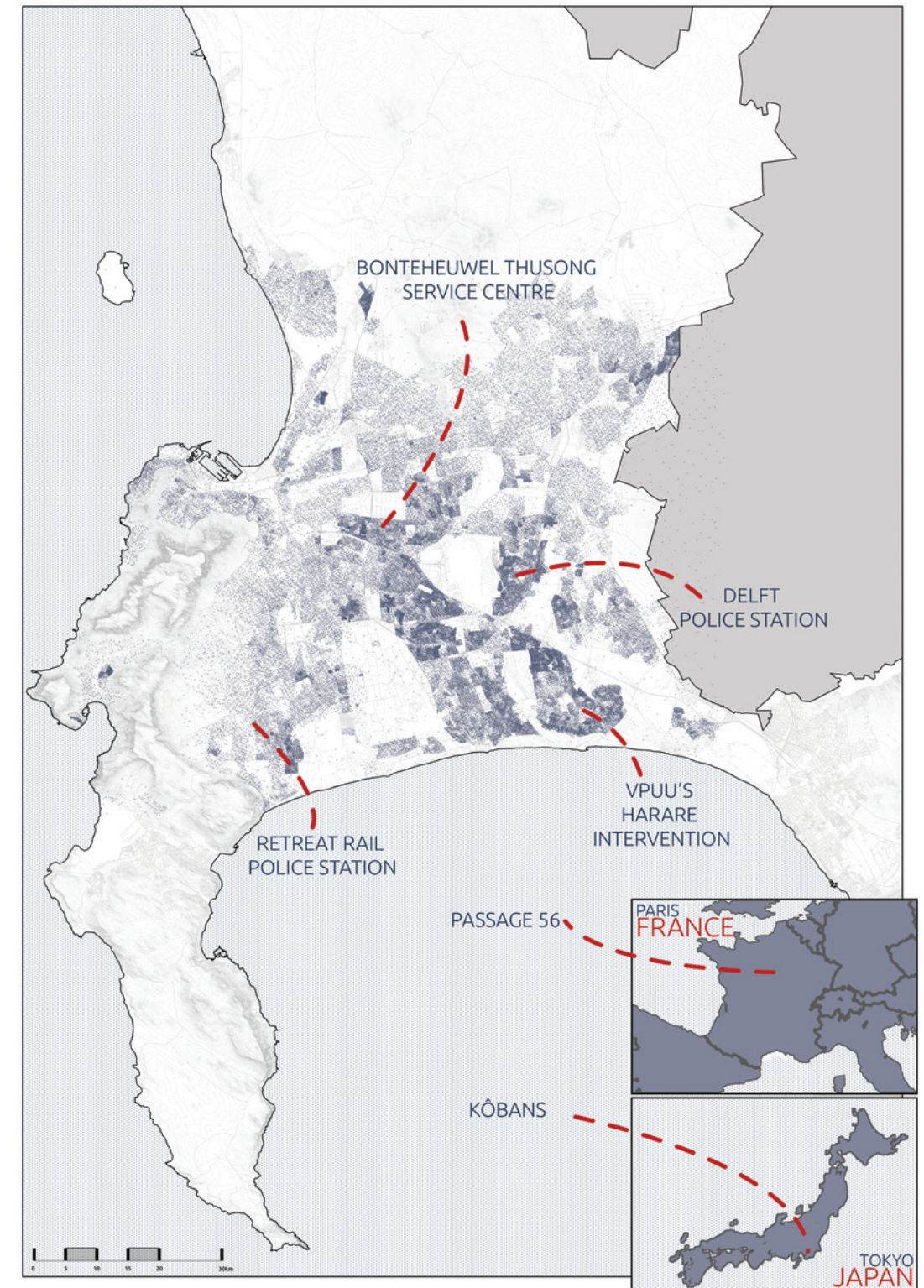


Figure 21 Map locating the precedent studies



## JAPANESE KÔBANS

<sup>10</sup>Stephan Brunner, Yasuhiko Machida and Ken Tadashi Oshima. 2006. "Policemen in a box."

Kôbans, in cities and towns of Japan, are a form of very small-scale community policing structures that work in conjunction with a police station. Directly translated to English, Kôban means "police box" and these buildings resemble kiosks<sup>10</sup>. They are mainly two storey buildings, divided between work and rest.

<sup>11</sup>Research Foundation for Safe Society. 2005. *Guidelines of Police Policy in Japan.* National Police Agency of Japan, p3

The government document's language on the kôban system alludes to how these interventions operate: "*...someone is always there, so it is convenient for visitors*"<sup>11</sup>. This shows that it is a true service building aimed at putting the needs of the "visitor" above the officer.

Figure 22 shows a few examples; In most of the photos, the police officers are visible and in some photos, they are standing outside helping people. This is partly due to rookie cops being stationed at kôbans but also because the project doesn't provide much indoor place-making. However, it provides safe exterior space.

This is an interesting precedent as there isn't a consistent architectural style, yet they are universally recognised, locally and globally. Usually, they are designed within the Japanese cultural style of Kawaii, which makes them full of character and quirk. This cultural style both makes light of and glorifies the building, creating a building that is both playful and respected.



Figure 22 Kôbans in Tokyo. Christian Knoerr



Figure 23 Kôbans designed to look like an owl, signifying a watchful guardian. Tokyo five



## PASSAGE 56

Passage 56 is a small building in Paris, in a left-over space between two existing buildings. The building is essentially a 2-storey threshold that allows an opening of the ground plan, but it also allows the building to hold the street edge. The project is a small community garden, storage space and office space, inviting a community buy-in.

The project acts as a catalyst for community participation and provides space for a host of community activities that sit outside, in the street, and within the garden. The building's open ground floor negotiates this dialogue.

The participatory construction process, which utilised recycled materials collected by the community, became a “social and cultural act”<sup>12</sup>.

<sup>12</sup>atelier d'architecture  
autogere, n.d, Le 56 /  
Eco-interstice



Figure 24 The building during two different events. atelier d'architecture autogeree



Figure 25 The garden space. atelier d'architecture autogeree



## BONTEHEUWEL THUSONG SERVICE CENTRE

<sup>13</sup> Government Communication and Information System, n.d., Thusong Service Centre.

The Thusong Service Centres are a new typology that have emerged post-democracy to address social, historical and economic needs. Therefore, “one-stop, integrated community development centres”<sup>13</sup> were established. The aim of the centres were to improve livelihoods, provide service provision and to build sustainable partnerships between the community, private businesses and government.

The Bonteheuwel Thusong Service Centre, built in 2002, were chosen because they include a small police station satellite element as well as a host of civic functions. These civic functions include: The Department of Social Services and Poverty Alleviation (which takes up the VSU’s role as well as other social functions like applications for pensions, disability grants and foster care), a community-based para-legal, an elderly and disabled care off-site service, an Alcoholics and Narcotics Anonymous space, as well as spaces for private businesses. These businesses include an after-school maths tutoring school and a driving school. There are also a few outside spaces that have been provided, these include a skate park/play area and a vegetable patch.

The tallest element of the project is the hall - it is placed on Camellia Street side, surrounded by the tall church and school. The rest of the buildings remain at the contextual residential scale with the roofs sloping up towards the centre of the site. The element that stands out the most is the main entrance, which is clearly distinguished from the rest of the project. The building produces a civic presence at a residential scale.



Figure 26 Corner of Jakkalsvlei Avenue and Elder Street. Google Earth



Figure 27 Entrance that is clearly defined. Google Earth

## VPUU- HARARE INTERVENTION

If we take the premise that crime is a social phenomenon, then the area where the most strategic impact be found is in how VPUU's developed spread-out strategy has used years of research and interaction to utilise public investment to achieve a safety strategy. However, this project works against the police station as an alternative way of dealing with the phenomena of crime.

The two focuses of the VPUU strategy are **human development** and **sustainability**. Human development looks at shifting the approach from one that is top-down (which can be problematic) to one that encourages "partnership" and participation to provide livelihoods. This is reflected in Nabeel Hamdi's work (2010): *"Poverty, in particular in the growing slums of cities everywhere, sits at the centre of our efforts today... Nor is it just the poverty of money, measured as it was in the 1960s and '70s with economic indicators, but the poverty of well-being and opportunity as well (as) livelihoods"*<sup>14</sup>

With the prospect or achievement of need fulfilment, people become more likely to participate in building something, thus it becomes easier to tap into the inherent wealth that is present in all people<sup>15</sup>. This brings in the idea of **sustainability**, which looks at creating an intervention that continues to exist without external help, thus could last indefinitely. Clear safety principles were developed with these ideas in mind.

The Harare Intervention by VPUU occupies a large area and therefore is afforded the opportunity to host a broad range of social programmes that includes community based NGO maintained sports facilities. All these spread out programmes contribute to a safer environment.

<sup>14</sup> Hamdi, Nabeel. 2010. The Placemaker's Guide to Building Community, p8

<sup>15</sup> Krause, Michael, et al. 2014. Violence Prevention Through Urban Upgrading - A manual for safety as a public good.



Figure 28 Delineated paths. Julian Raxworthy



Figure 29 Large Event. VPUU



Figure 30 Urban Park Precinct 3. Francois Firket



## RETREAT RAIL POLICE STATION

This building is positioned in a very busy node of the Retreat Train Station but the building itself is on a quieter side of the node. People are constantly being collected and dropped off by buses and taxis. The station mall hosts a plethora of shops (both formal and informal). The node is geared to the commuter.

<sup>16</sup> Mokeka, Mokena, and Holger Deppe. 2012. "SAPS Retreat Railway Police Stations." In *The South African Informal City*

<sup>17</sup> Makena Design Lab. 2014. Retreat SAPS Station.

The station was designed post-apartheid by Makeka Design Lab to address the problems of police service delivery. The building adopts a design language of transparency, service accountability and general well-being<sup>16</sup>. This came out of the concern expressed in which: *"All design precedent had a fortress mentality which manifested in robust, indestructible, vandal-proof buildings that worked against the civic environment instead of responding to it sensitively."*<sup>17</sup>

The building functions as a beacon at night, casting a blue light into the night, as you can see in *Figure 31*. The high clerestory windows provide natural light to the offices, but also provide an interesting way of indirectly revealing whether a police officer is in their office working. Accountability is further established with the 1800mm screen between the lobby and the shift desk, providing glimpses into the working areas of the police station. This is articulated by Makena: *"The design seeks to create an internal community, but also embraces its public role. It doesn't turn its back on the street, but actually invites and suggests a lifestyle, which is an escape from the inevitable brutality police are witness to."*<sup>18</sup>

<sup>18</sup> Makeka, Mokena in an interview with VISI's Remy Raitt, September 23, 2011

The building contrasts the usual police station palette of face brick, fencing and small glazing. The white bagged walls and large glazed portions of the façade create a new, more modern interpretation of a police station.



Figure 31 Front elevation at night. Architect's archive



Figure 32 Context



Figure 33 Front elevation detail





## SECTION 3 – SITING

### THE CURRENT BUILDING – ANALYSIS

The Delft Police Station is located at the centre of Delft and its police boundary contains some of the airport and is bounded by - the M12, to the North; N2, to the South and the R300, to the East.

The building was built somewhere around 1985. Due to the low density and lush trees along the front entrance of the police station it becomes obstructed. It was originally designed to have a community garden on the circle corner, showing the building and the signifiers clearly, as is seen in *figure 35*. In 2014 this garden was fenced in, with the main police signifiers sitting on the inside of the fence, as seen in *figure 36*.



Figure 35 2010 image of the building. Google Earth



Figure 36 Current pedestrian entrance

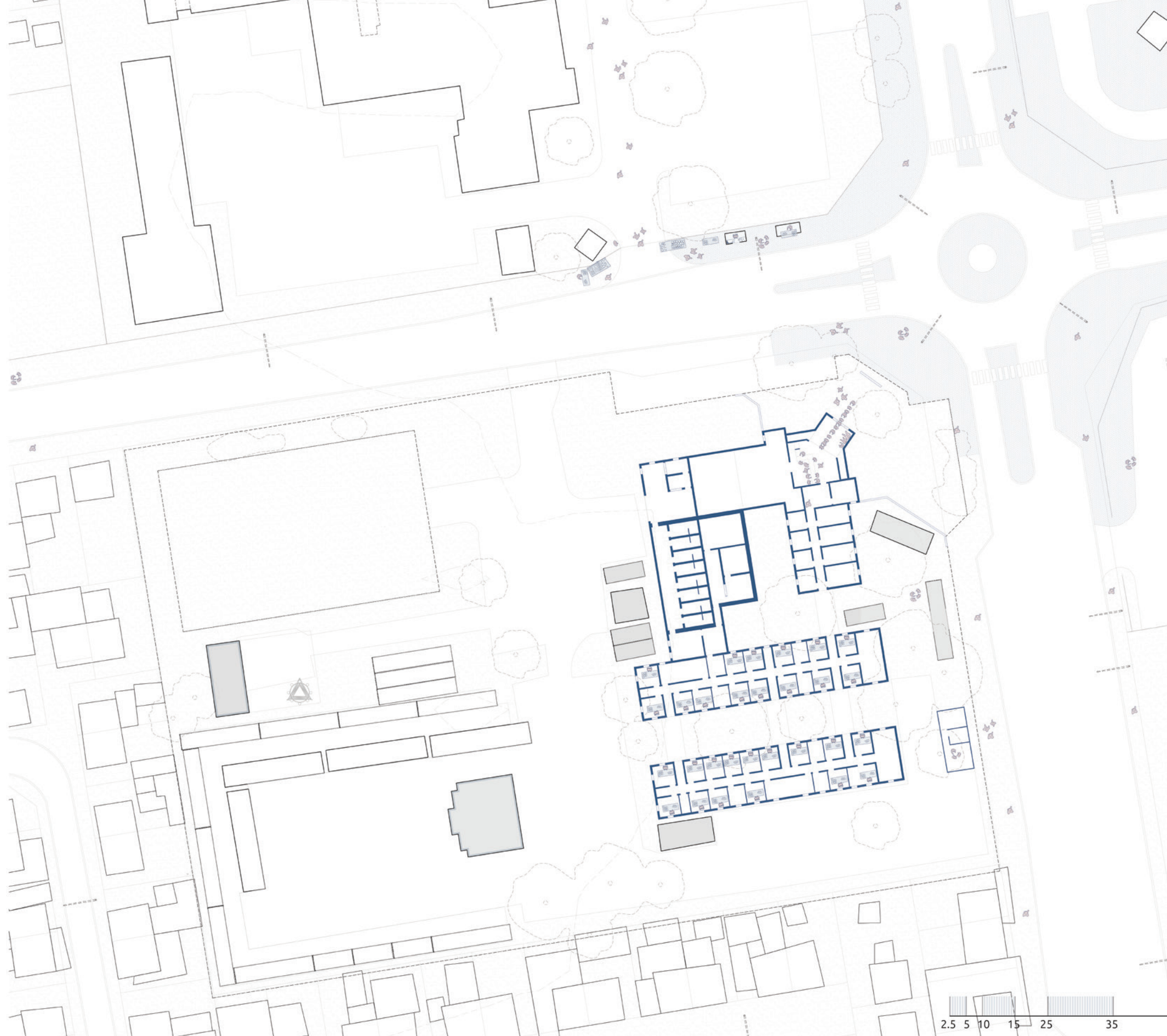
Figure 34 Left, Aerial Image of Delft and the police boundary, location of Delft Police Station and its location to other police stations.





**Figure 37** Locating Aerial Image of the current Delft Police Station





**Figure 38** Ground Floor Plan of the current Delft Police Station



### *Locating*

The current building<sup>ii</sup> is made up of three sets of buildings that make up the project. The project is comprised of, firstly, the community service centre (CSC), cells and ammo/evidence storage. This building sits on the corner and is the most public. The entrance to the cells processing is through the vehicle entrance side. The second building is comprised of two admin bands: general admin and the detective's offices. The last building is for confiscated goods and some mechanical support constructed out of shipping containers and prefab structures.

### *(Non-)negotiables*

Because the cell processing is on the vehicle entrance side, this allows a simple division of what is negotiable and what isn't. The cells, the vehicular access to the cells, as well as the parking was non-negotiable (shown in blue). These spaces are necessary for the normative policing to occur. The negotiable spaces (shown in red) is comprised of open land, the temporarily confiscated goods area, as well as car compound areas. The CSC was also put in this category as it has the potential to either be completely or partially re-built. This element is the prime focus of this dissertation. There is a third category (shown in grey), which are negotiable spaces but are existing structures that can either be left as is or re-configured slightly. The elements in this category are the admin building bands and some containers and built structures.

### *Interfaces*

The existing interface with the public is incredibly limited to one small pedestrian entrance, a fenced-off garden and a cramped CSC.

<sup>ii</sup> Not as-built plans. Plans produced from walk to victim support unit and research.

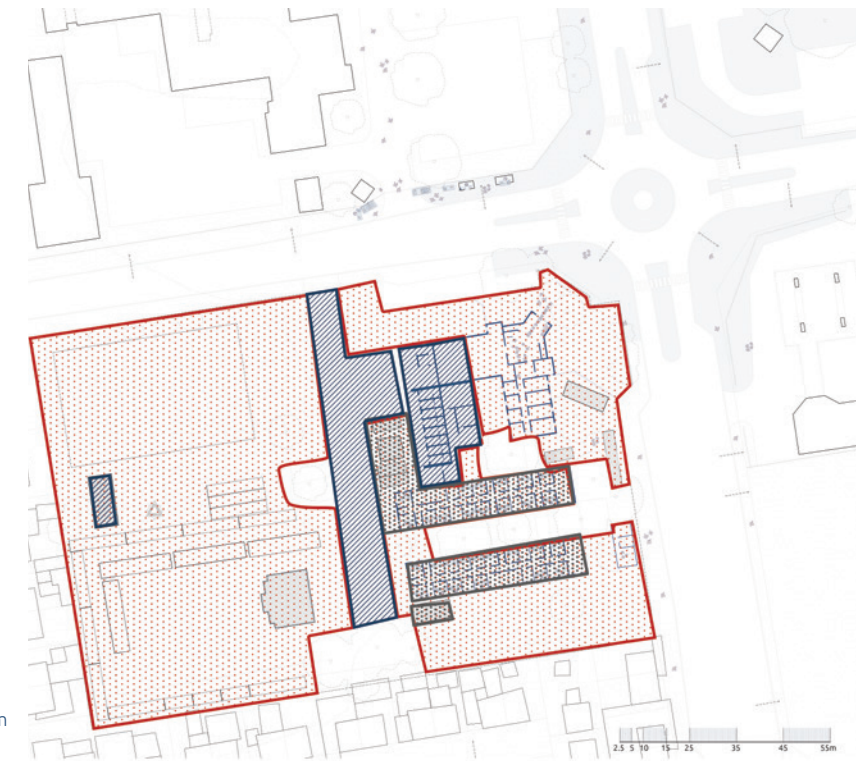


Figure 39 (Non-)negotiables diagram



Figure 40 Interfaces diagram

## THE CURRENT BUILDING – NARRATIVE

As a pedestrian, it is tricky to find the front entrance. When you finally find it, you must wade through a group of people who seem to be constantly waiting outside the police station for a taxi. Entering through you must move around the police signage (now obstructed) to get to the building entrance where you are greeted by the line for service, now outside the front door. A ramp leads you to the service desk. Along the ramp incline, benches are positioned. There are two foyers; most of the ramp is in the first foyer that, on plan, is the corner of the station. This foyer has windows on three of the four sides and although it is a frosty winter day, it is hot and stuffy. The service desk is rotated so that when you approach it, you are greeted with a desk corner. It is incredibly busy: the five officers in the small desk space are cramped and busy helping the people in the line. To the right adjoined to this desk space are more intimate service desks with two spaces. There isn't an officer positioned there. This is the public community service centre (CSC), the only part of the building that has public access.

There is a gate with a key pad lock that leads to the service block, where you move down a tight unventilated face brick passage. You pass through the service block building where you are greeted with plastered finish walls (only the non-public walls have these). Here, you turn left and around the building. You pass the small windows that show only a small glimpse of what is happening inside, as well as a few shipping containers, which, although temporary, have become permanent features.

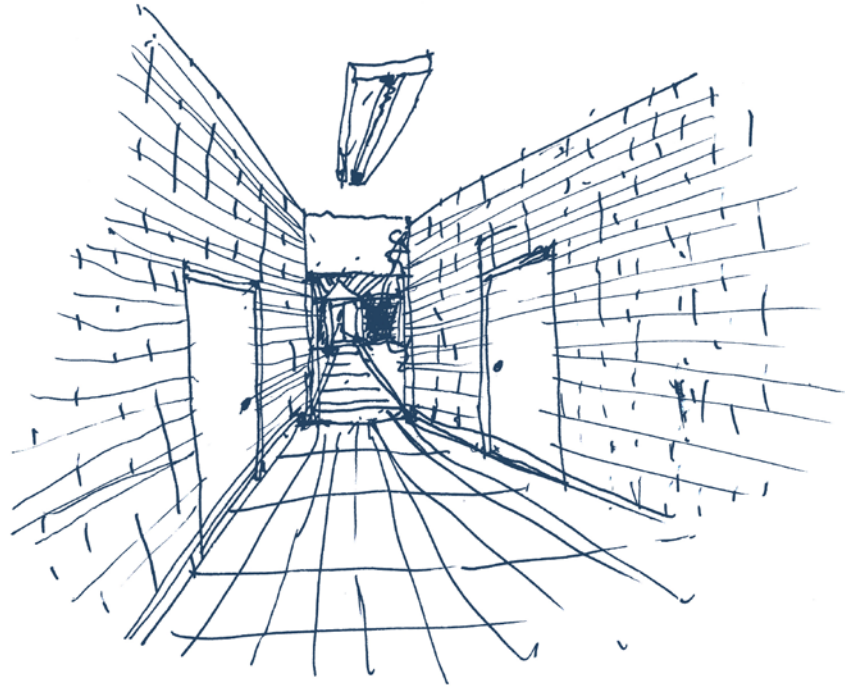
You stumble upon a non-descript prefabricated building: the entrance is clumsily placed opposite a tree, so you must double back to enter. The inside has been made into a very comfortable space, music is playing, and the backroom is furnished with comfortable couches and chairs. There are six people in the structure and it feels crowded. This journey has taken you to the official VSU or the Victims Support Unit, which is where you get counselled after a trauma. It is over 50m from the CSC, which further indicates the segregation of programmes. The CSC and the VSU should be integrated.

Figure 41 Route to VSU

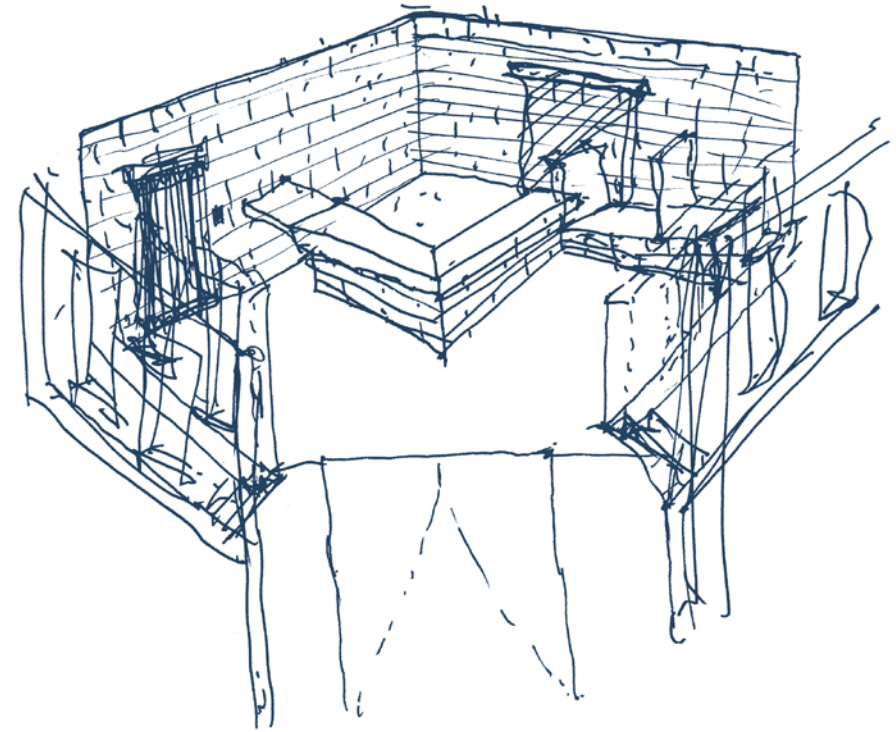




An interesting mix of people were observed within the project. Those assisting others and providing a service were pushed further into the site behind layers of security gates, walls and rooms. A youth programme was being held towards the back of the site. The site has the potential to be more civic, if these programmes are brought forward and made more visible and accessible



**Figure 42** Sketch of the service block passage, on the route to the VSU.



**Figure 45** Current CSC sketch



**Figure 44** Current Delft Police Station. From right: Traditional blue light; Multiple boundary methods are used; The steel palisade fencing is splayed towards the public.



## SECTION 4 – DESIGN PROPOSITION

### BRIEF

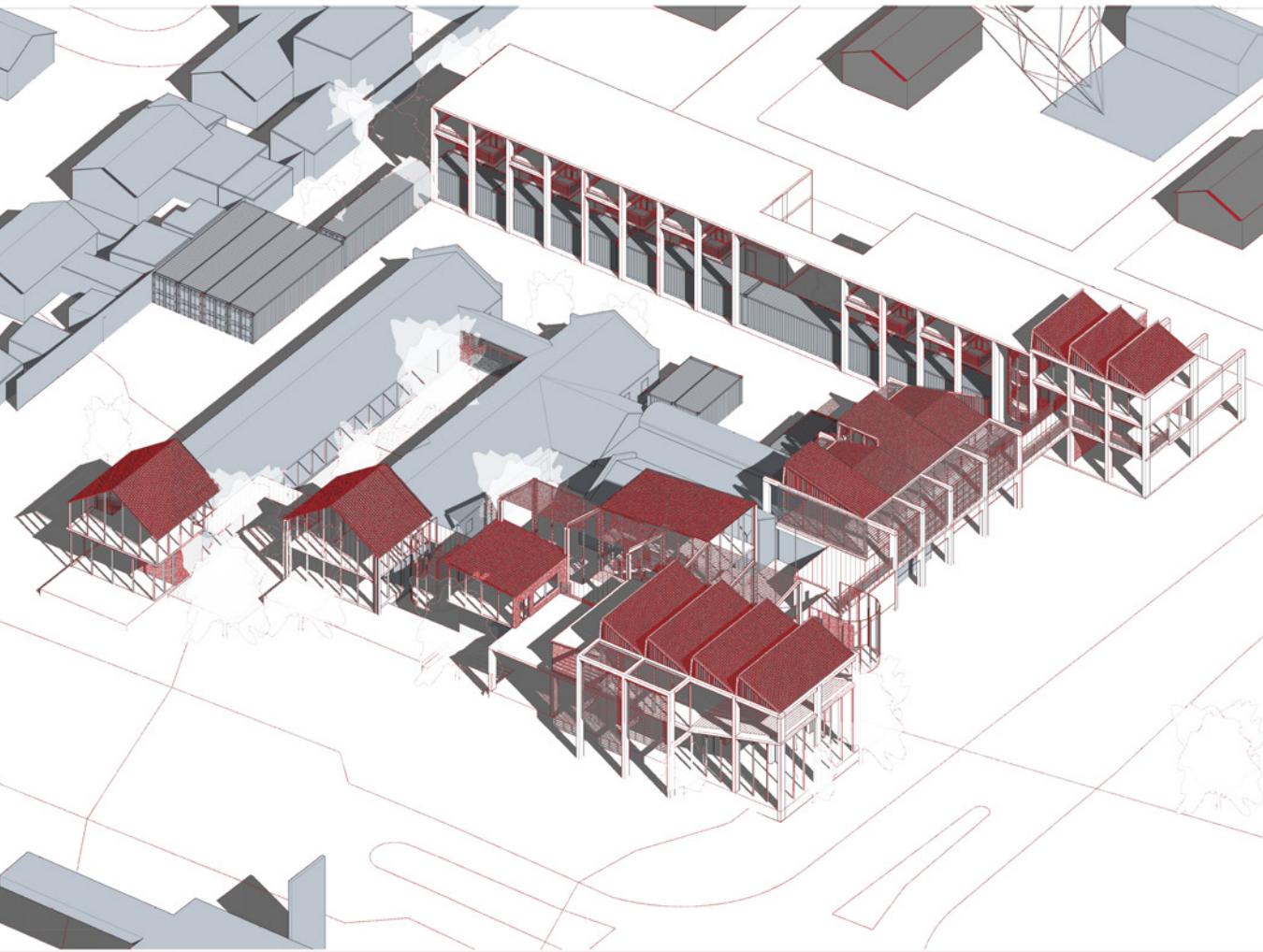


Figure 46 Axonometric View

The design intervention is to reconfigure the public interface. This is achieved through intensification through densification, as well as through the introduction of new programmes and a re-introduction of programmes that didn't have adequate representation. An aim of increasing accountability of the officers to the public as well as to themselves was identified.

The programming for the newly re-imagined police station attempts to do three things:

- Make the existing operation of the police more efficient, more transparent and more accommodating of police-officers' everyday needs*
- Accommodate the new safety and security functions that have emerged in post-1994 policing policy*
- Attach new non-policing programmes to the building to help make the police station a desirable destination, rather than a building associated with trauma and criminal activities.*

This programme mix is made to encourage multiple ways of approaching safety within the design intervention. These interventions act as a way of including other alternative crime prevention strategies within a normative space. Reimagining the space with the intention of de-fortifying the mentality surrounding the police station aims to produce a police station with a higher social capital.

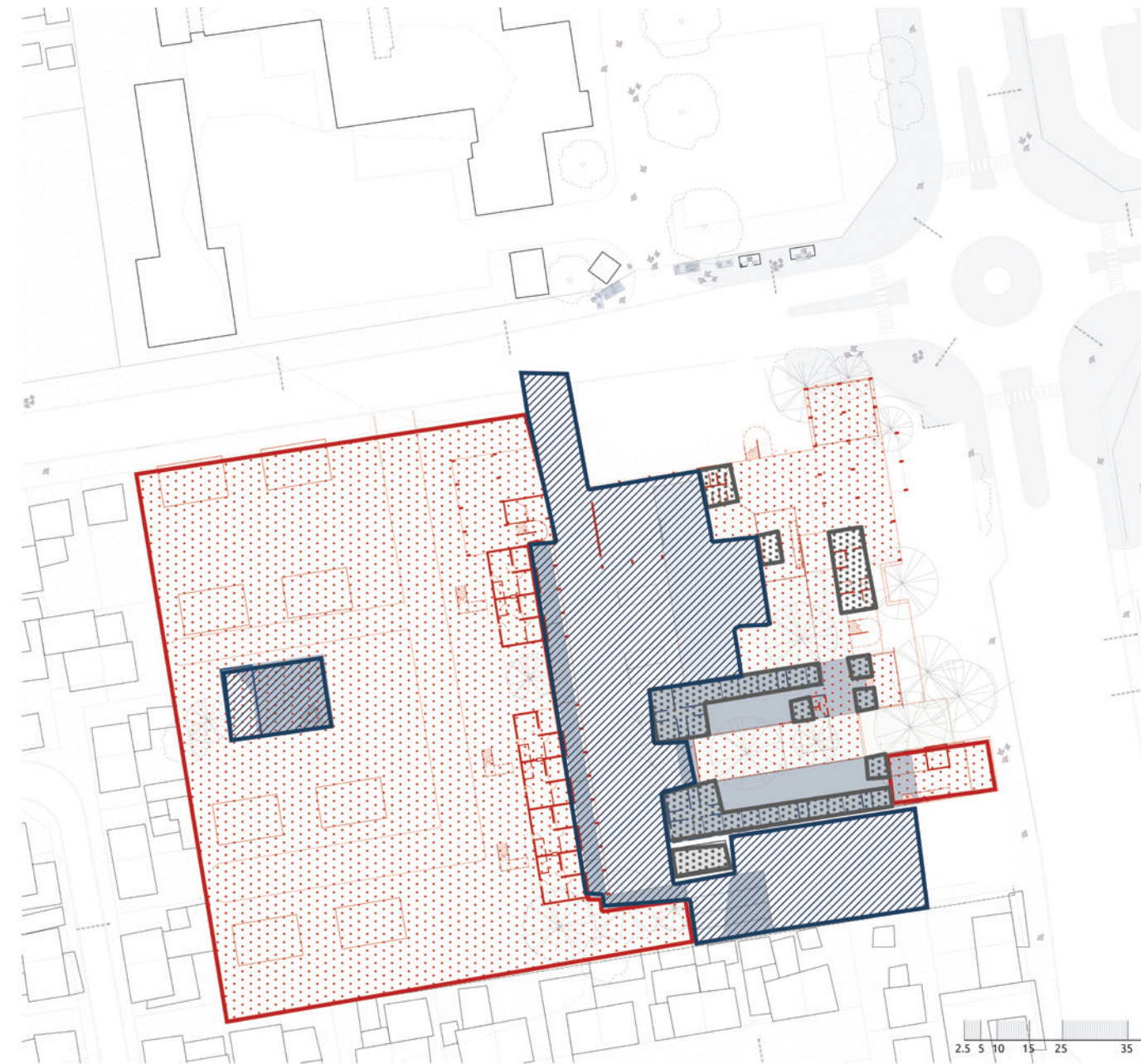
## INTENSIFICATION

### DIVIDING THE SITE

The site currently has a significant lack of density towards the west, with an inefficient layout of the shipping containers and temporary prefab buildings. The erf, which is the size of two city blocks, has a servitude road dividing it, which is only accessible to the police vans and staff cars. In an aim to intensify through densification, the strategy is to divide the erf into two equal parts and sell the west side to another agency (preferably for new housing to address the housing void that is present in Delft). In the aim of the co-production aspect of this studio, this new plot could be an area designated to past masters student, Kayla Brown, whose inventive housing typologies could find life. An east-west housing block will act as an edge definition between the police station site and the new housing development site, with balconies looking over the police site.

### OPENING THE GROUND FLOOR

Accommodating the division of the site, as well as the increased intensity of programme, requires another level to be added to the existing building. This transforms the design intervention into a landmark in the mono-height Delft context. Another opportunity that presents itself by including another level is the ability to free up the ground plan, thus allowing the fluid nature of public space in Delft to inhabit the building. The architectural device that allows this freedom is the *pilotis* structure, accommodated with a concrete frame. This provides an increase in density, an opening of the ground plan, and allows the design intervention to hold the street edge.



**Figure 47** Ground floor plan showing the site divided based on the servitude space with housing. This plan also show the free-ing up of the ground floor towards the circle.



## PROGRAMME

### RE-CONFIGURING THE EXISTING

The programmes that exist in the current police station are: the **community service centre (CSC)**, the two **admin building bands**, the **holding cells** (with processing), the **ammo and evidence storage**, a **service block**, a small **victim support unit (VSU)**, small **Community Policing Forum (CPF) office and confiscated goods storage**. These comply with the current normative process in the station.

The process involved identifying the elements to be kept, as well as to reconfigure the operation of the normative to provide accountability to the public but also to each other. This has been achieved by establishing visual relationships between the different elements. For example, the two admin bands have been reconfiguring by carving out two open plan office spaces. This opens the buildings up to the public courtyard, while creating a visual link between the two bands. The open plan office space is a more efficient working model as more desks can be put in the space versus the single officer per cellular office.

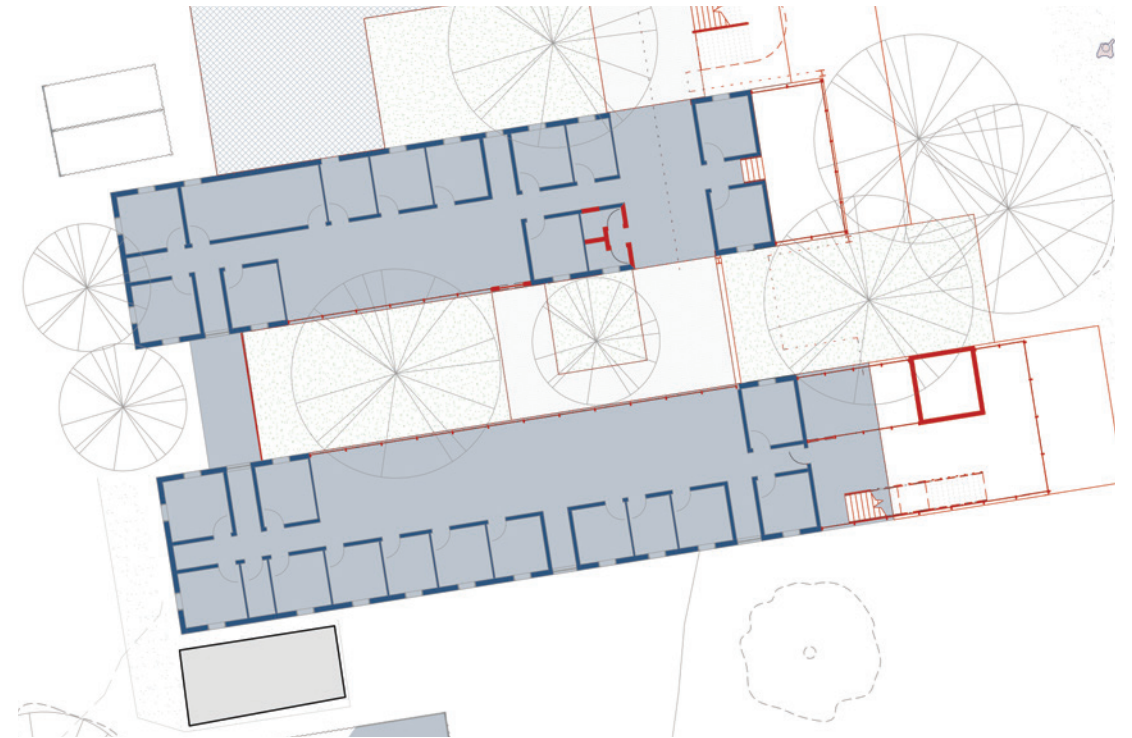


Figure 48 Admin bands that have been opened up to the public and the NHW and CPF give life to the building ends

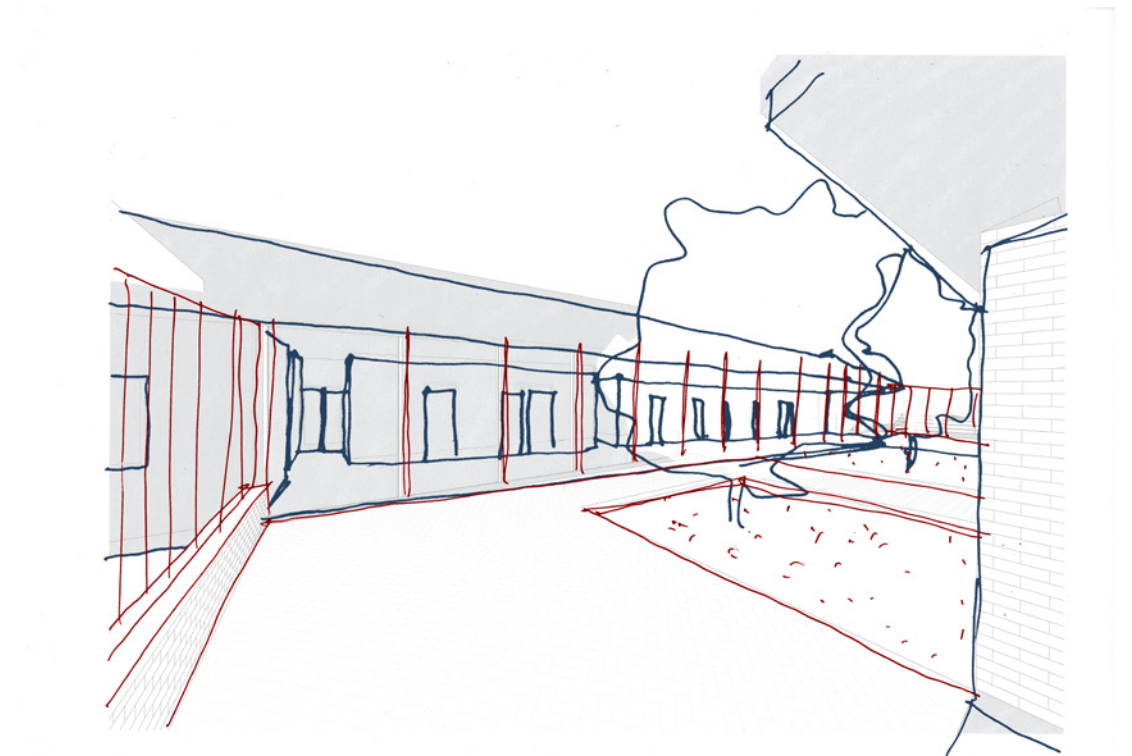


Figure 49 View into Detective band and public garden

The current community service centre element has been demolished to allow for the pilotis structure and moved towards a more central location within the site, with clear visual lines to the surrounding area. This position allows for the CSC to be seen by most of the other spaces in the building. This process also involves the shift of the admin area to encourage a more active role played by the officers who operate in this section. Currently, the admin area is comprised of a person sitting at a desk taking calls and passing on the call to the officers on duty. This is a passive officer, so to encourage their role to be more active, their station is positioned above the CSC, with clear visual lines like the CSC.

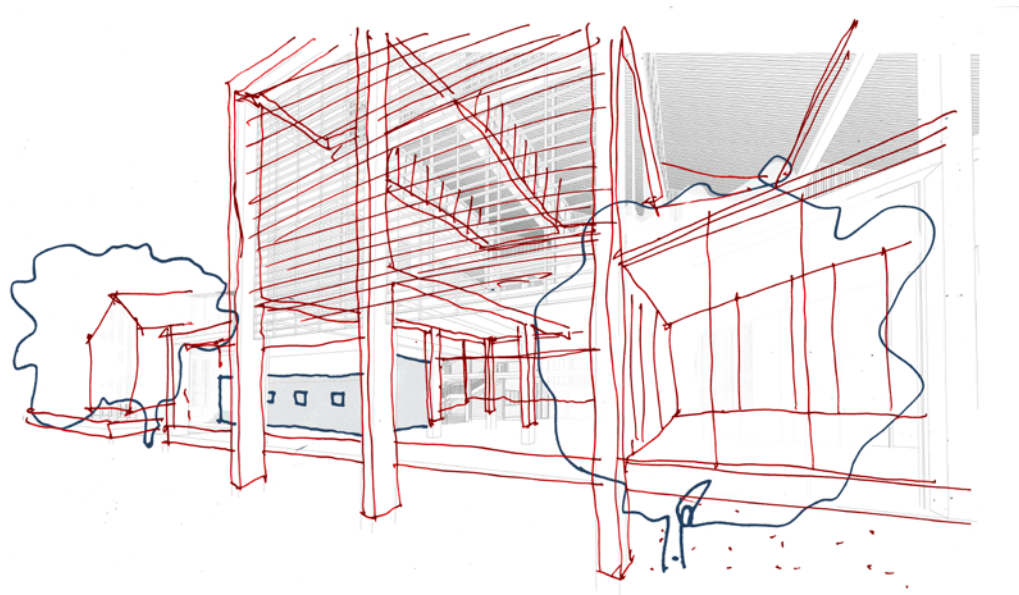


Figure 50 Entrance Sketch , the CSC is seen through the open ground floor

The post-1994 vision for policing, as articulated by Sydney Mufamadi called for *"our people to participate in the provision of safety and security."*<sup>19</sup>. This has prompted the need for additional programmes that explicitly accommodate new community-orientated safety and security functions. The new functions that have emerged are the **CPF, Neighbourhood Watch (NHW)** and the VSU. Although the current building accommodates some of these functions, they are inadequately housed, with little space allocated to the CPF and the VSU, and in the case of the NHW, no space at all.

Notwithstanding the fact that these post-1994 programmes are the most important features in current policing policy, they have little physical presence within the current police station where they have been pushed to a back office and a prefab building positioned far away from the building entrance.

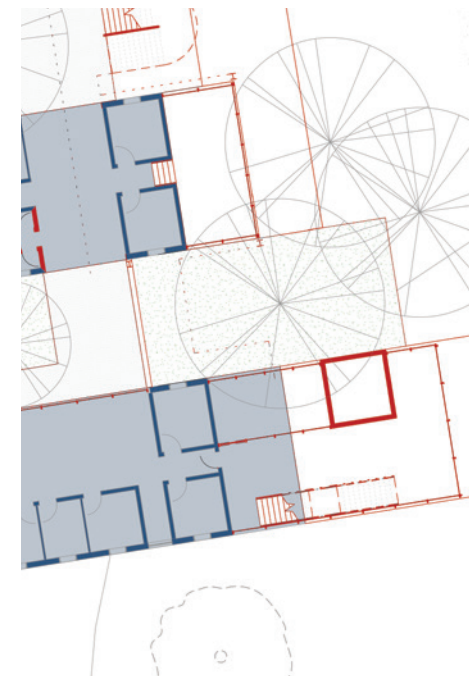


Figure 51 NHW(top) and CPF(bottom) give life to the building ends

In the re-imagined police station, these programmes constitute a public entrance, granting them both autonomy while simultaneously connecting them to conventional policing activities. The NHW, which includes a shift admin and the CPF, are located at the public ends of the two admin wings, creating a necessary interface between people and police. The VSU is positioned in the old service block, opposite the new CSC.

<sup>19</sup> Mufamadi, Sydney. 1998. "Foreword." In *White Paper on Safety and Security* - 1998, p2



## ADDING SOCIAL AMENITIES

Many new programmes – traditionally not associated with policing – have been introduced on the site. These comprise of **dance space**, an **art/craft space**, a **music room**, a **radio/recording studio**, **youth cafes** and a **picture book library**, providing accommodation for much needed social amenities. These programmes are much needed in Delft, which offers few recreational amenities (especially for the young – and often unemployed – people). Significantly, these are non-intimidating programmes which can help to transform the police station into a more attractive destination. These programmes also provide opportunities for community members to communicate their feelings in non-violent ways. Lastly, they provide spaces for police officers to interact with the community, helping to build better relationships between the police and the people who they're supposed to serve. These spaces also encourage 24-hour activity, helping to improve the police station's approachability (particularly at night). This has the potential to transform the police station corner from one of Delft's most popular mugging spots into a vibrant cultural precinct.

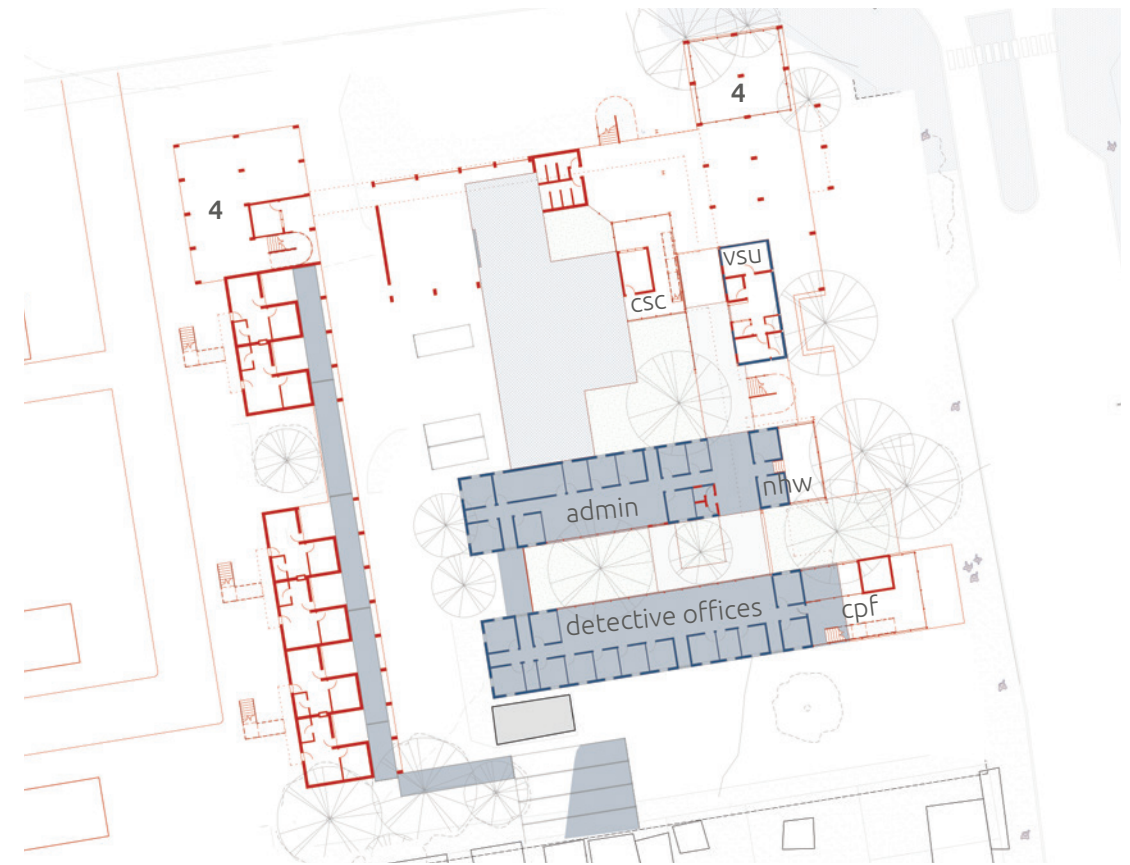


Figure 52 Ground Floor Plan

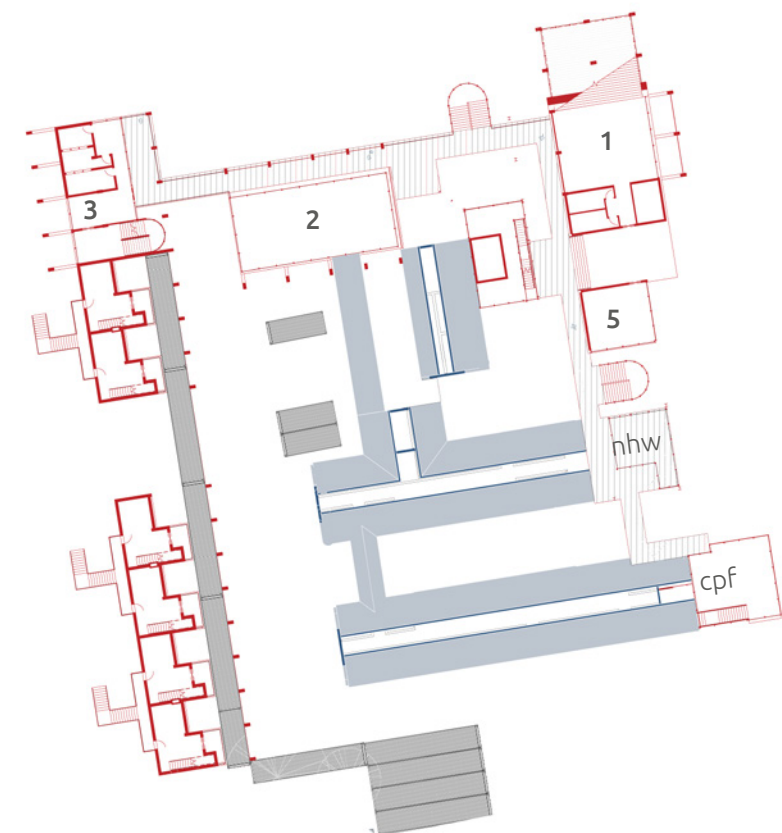


Figure 53 Ground Floor Plan

## MAKING THE EXISTING SPACES SHALLOW

Spatial syntax was used to uncover the fluidity of space in Delft. When the techniques are applied to the current police station, it can be observed that the space is very deep, which means that you move through more thresholds. The less thresholds involved in the space, the more integrated or shallow the space becomes. Therefore, as a way of making the police more accountable, a re-configuration of space to make it shallow allows for most parts of the building to be more accessible.

The spatial syntax analysis was done from the point of access for the public. The current building's deepest office space has a depth of 12 and the same office space in the new configuration has a depth of 6. This also applies to the rest of the building where the deepest space is 7 which is the dance space's changerooms and the music practice space on the second storey.



Figure 54 Current ground floor syntax depth

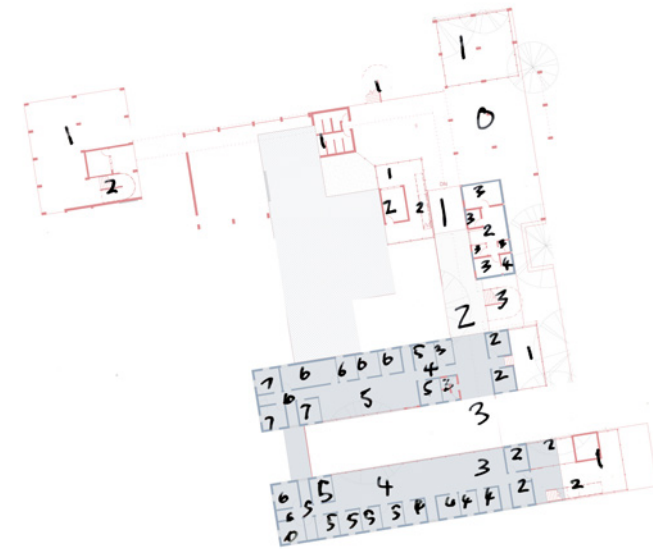


Figure 55 Intervention ground floor syntax depth

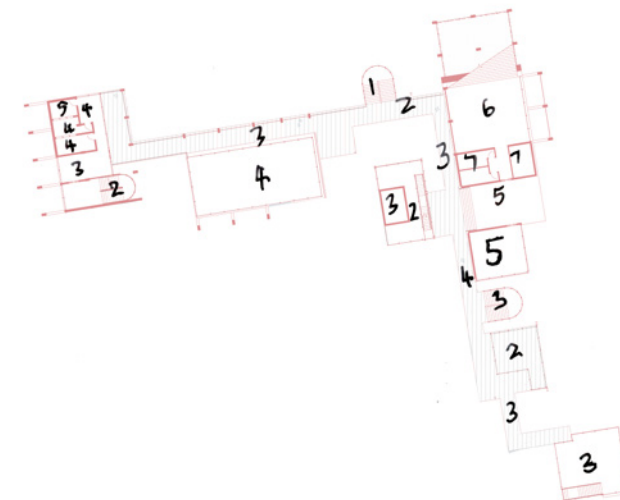


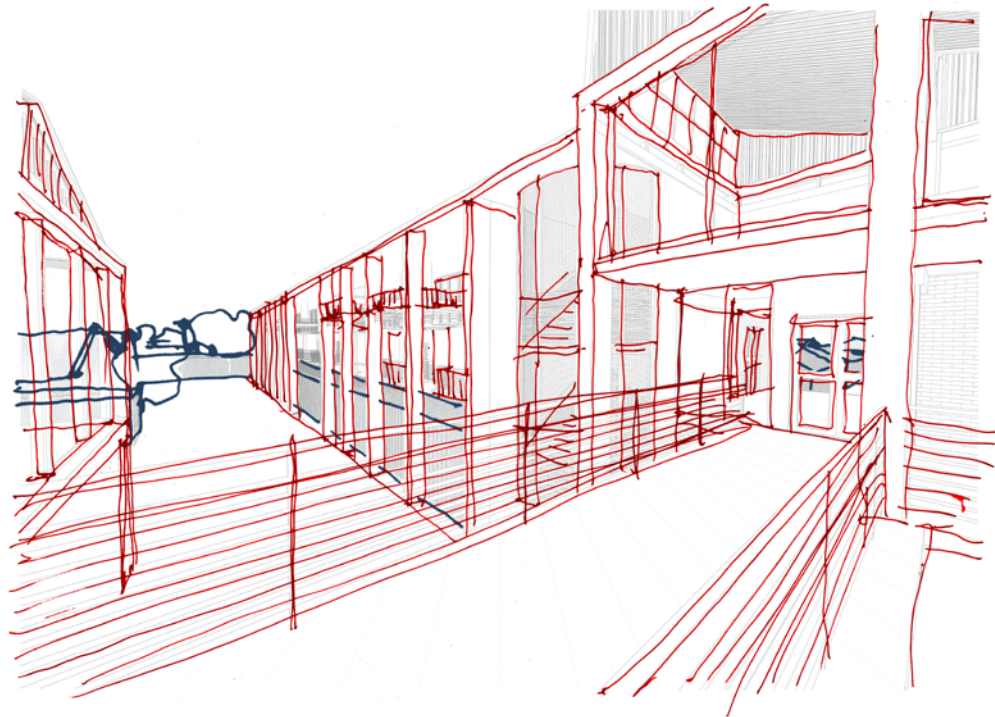
Figure 56 Intervention first floor syntax depth



## CIRCULATION

To accommodate the shallowing of the space, a careful consideration of circulation was conducted whereby the circulation was placed in conjunction with the outside area so that the space is conceived as unified. This allows for a relationship between the two floors as well as between the programmes. The circulation around the new transparent CSC becomes an atrium space.

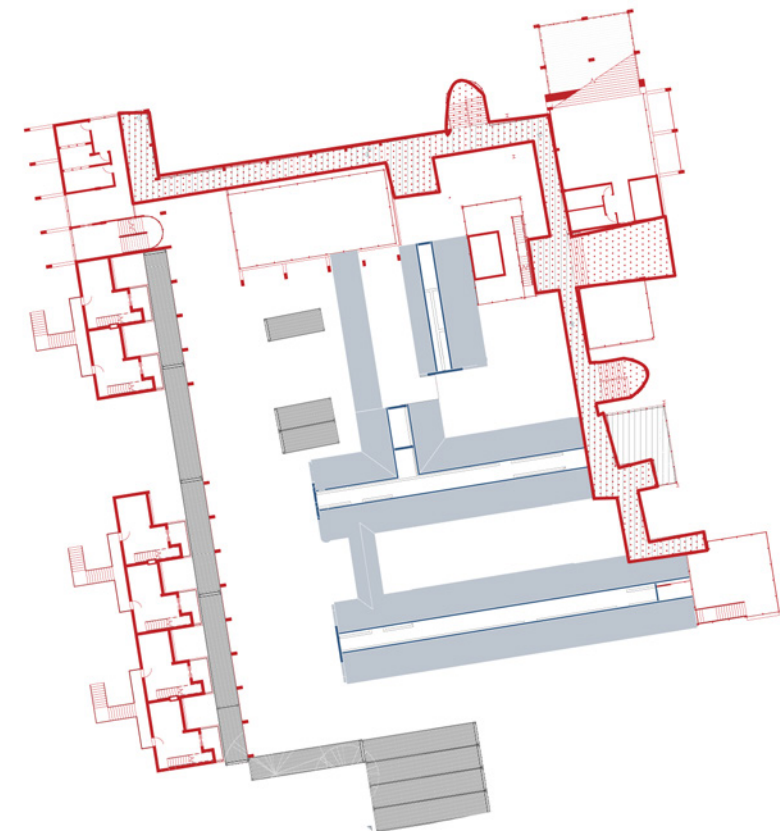
Connecting programmes that previously didn't interact allows an experience of the building that wasn't achieved before. For example, there is a connecting element between the art space and the music hub that spans over the vehicle entrance, allowing a connection between the public and the activities that occur in the service space of the police station behind the building, as show in *figure 57*.



**Figure 57** The connecting element over the vehicle entrance.



**Figure 58** Ground Floor Plan circulation



**Figure 59** Ground Floor Plan circulation



## LOCAL CONSTRUCTION EXPLORATIONS

As one of the ways of encouraging community buy-in to a project located within areas like Delft is to utilise community construction participation. This can utilise the local community in the construction process by building a part of the project. This is seen in the work of Iain Low in Lesotho where the concrete framed-infill building was purposely left with some infills open. These were for community construction participation, where unskilled people would help with the construction of the school for their kids. A unique institutional quality was achieved, which was allowed through the framework for community construction participation.

The Symphony Way Community Day Centre and VPUU's Harare Intervention both encourage a community construction element, which is most notably the implementation of mosaics on feature walls. This is a skill that, although provides an inclusive construction practice that softens the buildings, is limited to a very few select projects. It doesn't carry weight further than the project itself and doesn't participate within the auto-construction nature of Delft. If these methods are adopted it will add a sense of familiarity towards the architecture, as it is different but not too far off from other buildings, particularly the additions in the area.

How can a local construction culture of Delft feature within the project to allow for a similar intuitional quality that is achieved within these projects? This section will look briefly at the local Delft construction culture and the potential implementation of this culture in the design proposal.

The areas of interest are *light-weight panels, masonry, aluminium* and *steel work*.



Figure 60/61 Left, Symphony Way Community Day Centre (CS Studio) and Right, VPUU's Harare Intervention (Julian Raxworthy).

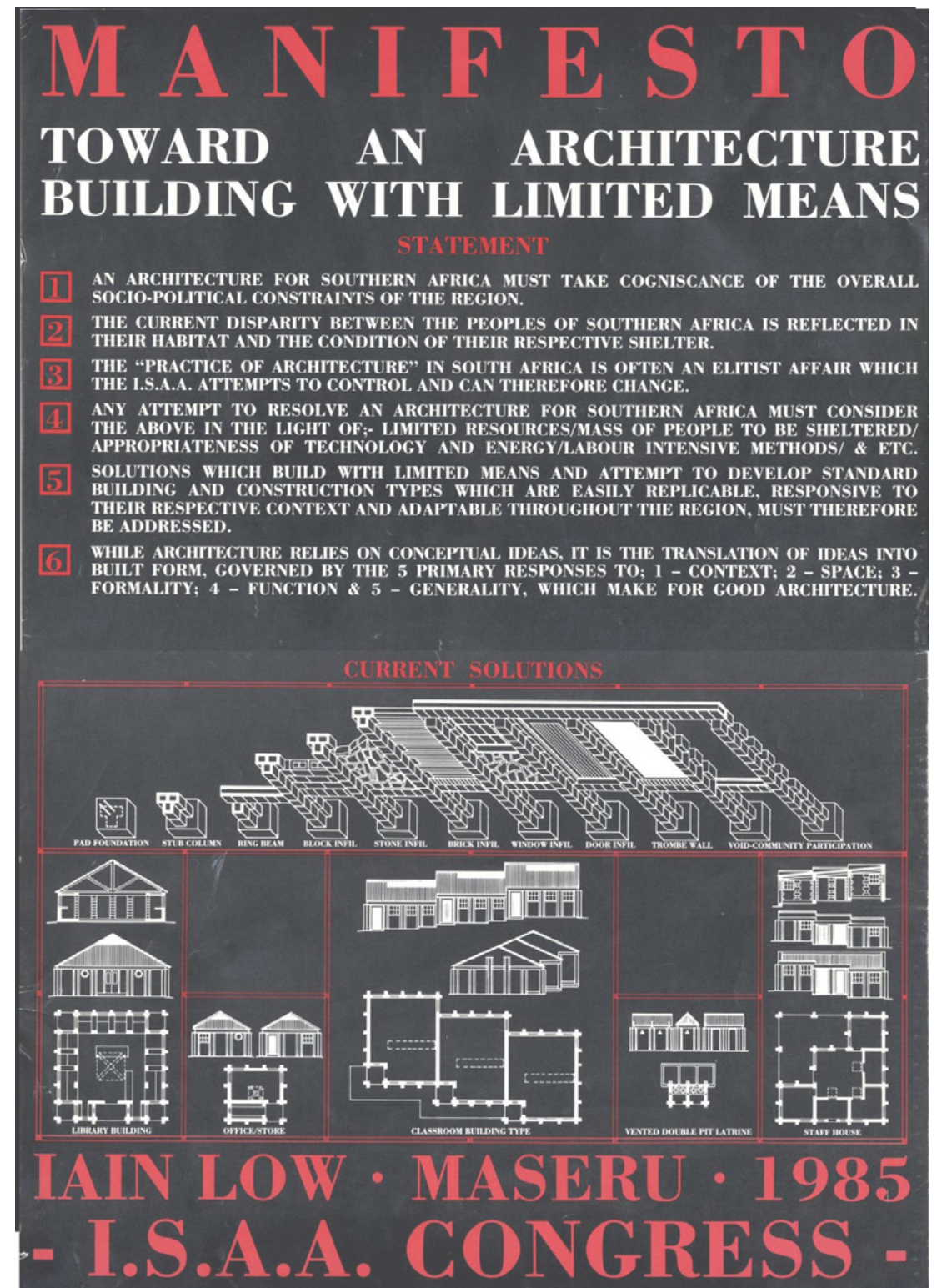


Figure 62 Manifesto poster for the South African Institute of Architects conference, 1985. Iain Low



### *Light-weight Panels*

Most housing additions and roofs are made from the same elements. Timber/ steel/aluminium (in the context of Delft, timber) is used as a substructure and sheeting or cladding on the outside, and if financially viable, insulation and plaster board on the inside. Corrugated cladding has an association with townships in the post-1994 South Africa, and this is partly because of its durability and versatility: both walls and roofs can be constructed using this same material. The timber substructure offers an interesting possibility for the elements of softening and shade within the project. There is an opportunity for community involvement through the addition of pergolas or a non-geometric patterned sun screen that don't require a level high of precision or skill to produce. The positive aspect of timber construction is that it can be cut on site, and the off-cuts can always be utilised in other elements in the building (for example, it can be used to construct benches).

### *Masonry*

The most utilised masonry material in Delft is the concrete block because it is cheaper and bigger than the standard clay brick. A single leaf concrete blockwork wall has a similar structural performance as a 280mm clay brick cavity.

### *Aluminium*

Local workshops extruded and build doors and windows. This is a new practise in Delft.

### *Steel work*

There are many local steel workshops making gates and burglar bars, these skills could be used to make balustrades.



Figure 63 Lightweight timber construction



Figure 64 Concrete blockwork construction



Figure 65 Aluminium construction and production

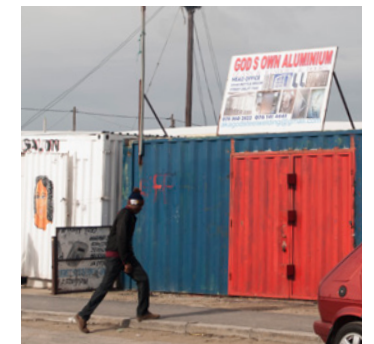


Figure 66 Steel construction



## INTERVENING INTO THE EXISTING

The initial move was to demolish the existing as it would be an easier task to start with a clean site, yet this doesn't talk to an idea of transformation of the current. So, the dissertation intervention will work to resolve a dialogue between the old and new while being explicit of what is new and what is old.

The gable extensions that house the NHW and CPF extend the existing building into the public. This allows the building to find a life within the public realm rather than stepping back and fencing off. The circulation system offers views of the current building as a constant reminder of the role that the police played and how that role has transformed. While the gable extensions extend out the removal of the old CSC extends the public realm into the old causing a blurring of the boundaries that once existed.



Figure 67 Ground Floor Plan Interfaces



## CONCLUDING THOUGHTS

The current police station model isn't aligned with the post-1994 policies, this dissertation focussed on a part of a systemic issue, by looking at the interface between the police and the community. This became mainly a boundary treatment and programming exercise; that re-configured the existing programme, resurfaced post-1994 programmes and brought in new programmes. This mix brought amenities to the project that worked towards building a new relationship with the police and the community that they serve.

This re-configuring of the relationship allows a few opportunities to occur. Firstly, the police are more accessible, and therefore more accountable and reliable. Secondly, there's multiple ways of getting service, apart from the normative service. The ability to go to someone you know from the community that is part of Neighbourhood Watch or the Community Policing Forum becomes an option. Thirdly, through the mixed programme the intervention allows for more natural social interactions with the police, strengthening general relationships and forming interpersonal relationships.

The outcome of this dissertation is to produce an intervention that re-configures the existing police station, this approach could become generic thinking in re-configuring existing police stations in the Western Cape or South Africa.

However, crime is a social issue and the social relationships around it are out of the control of architecture. Present within the SAPS, is a police culture issue that continues through from the apartheid era. Although this dissertation offers some spatial configurations to increase the relationships between the community and the police, it is up to the people who inhabit the built intervention to decide. A contextual approach will need to be adopted taking into consideration the existing relationships present in the areas. The interventions strengths would be in how contextual it is, allowing for a variety versions of this new hybrid police station model.



Figure 68 Delft Peach March end point outside the police station





Figure 69 Image of final dissertation presentation in progress.



Figure 70 Final model scale 1:200



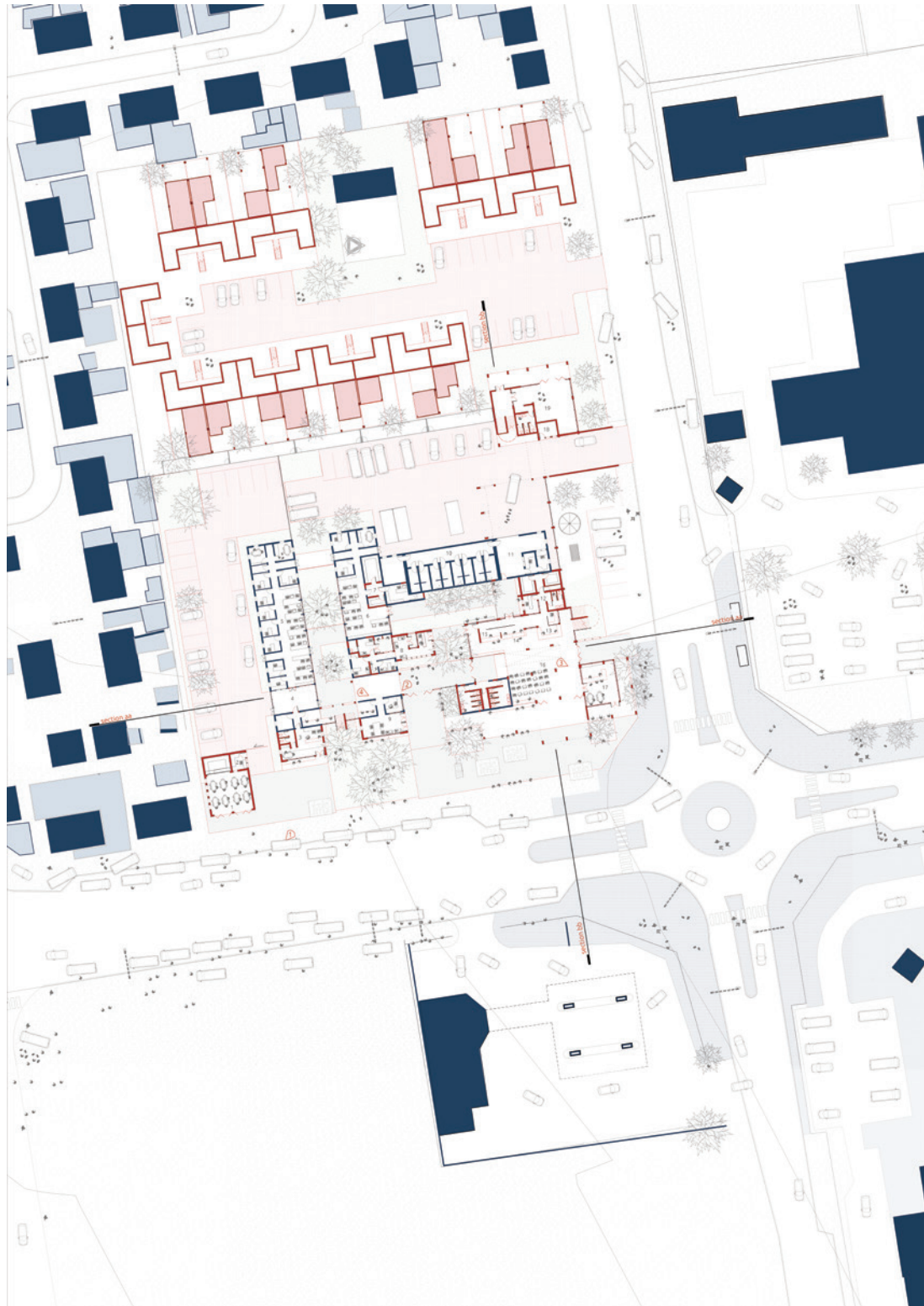


Figure 71 Intervention Ground Floor Plan 1:200



Figure 72 Intervention First Floor Plan 1:200

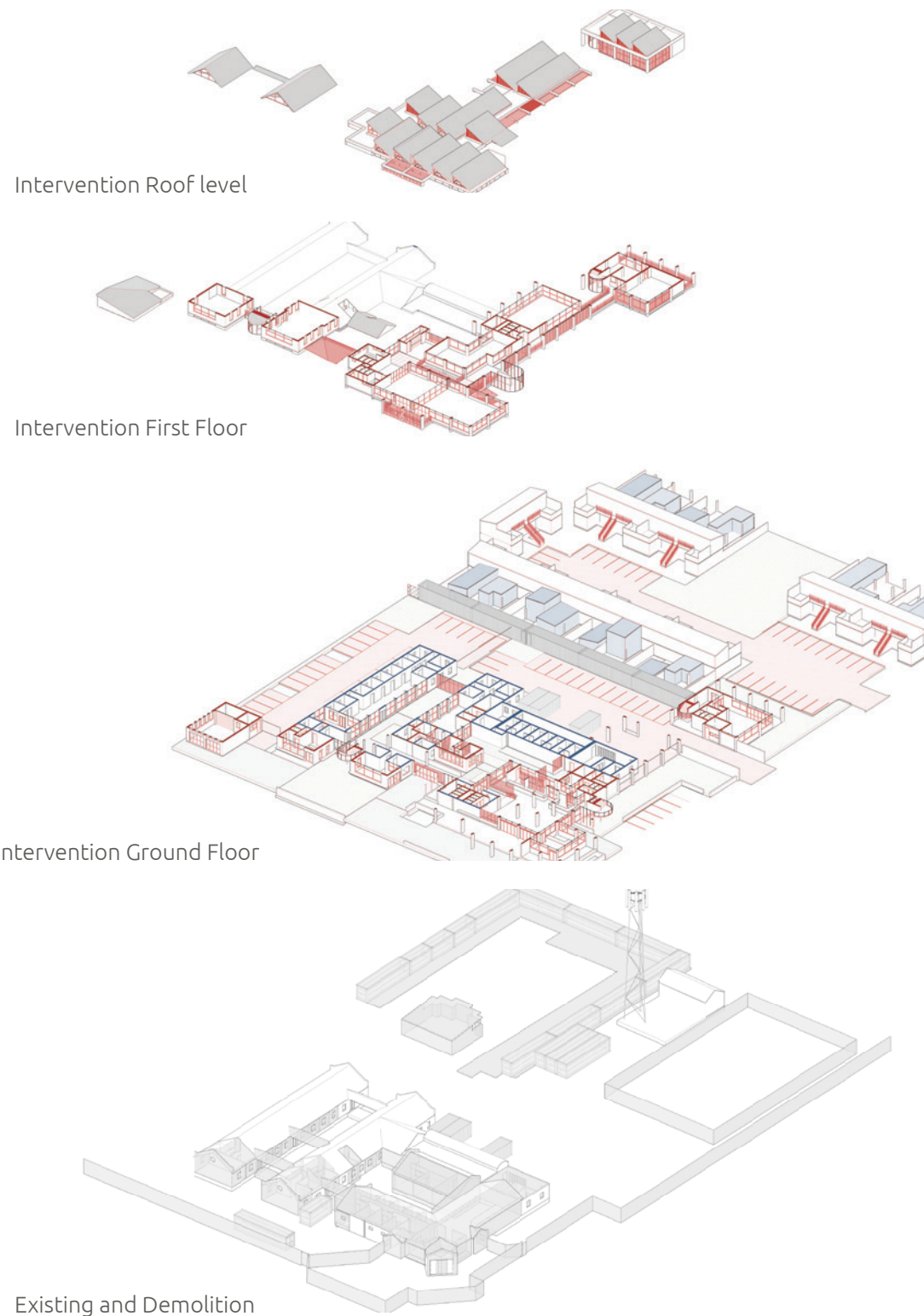


Figure 73 Axonometric 1:200

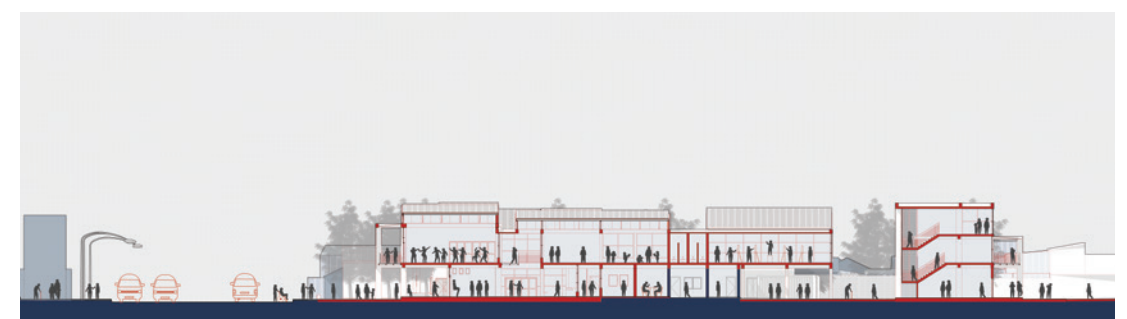
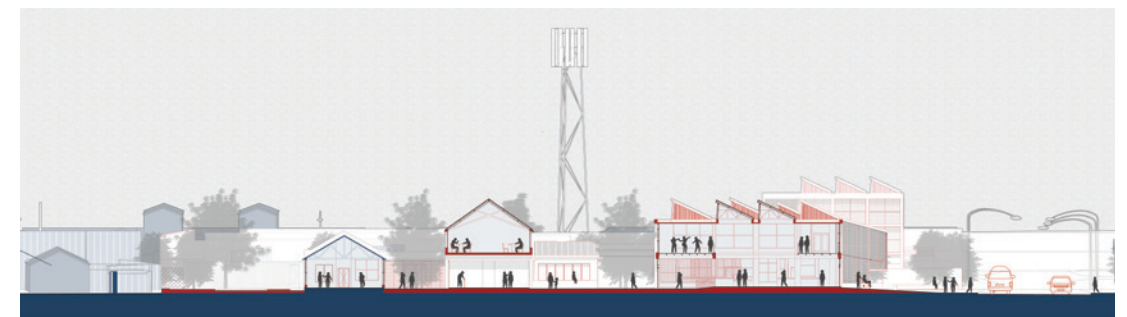
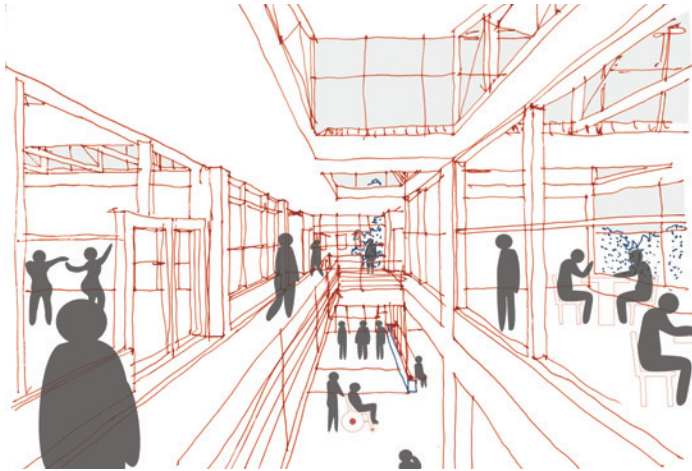
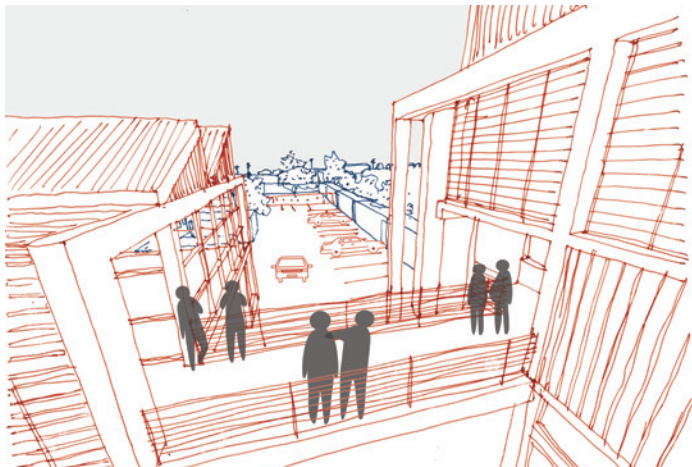


Figure 74 Sections and Elevations 1:100

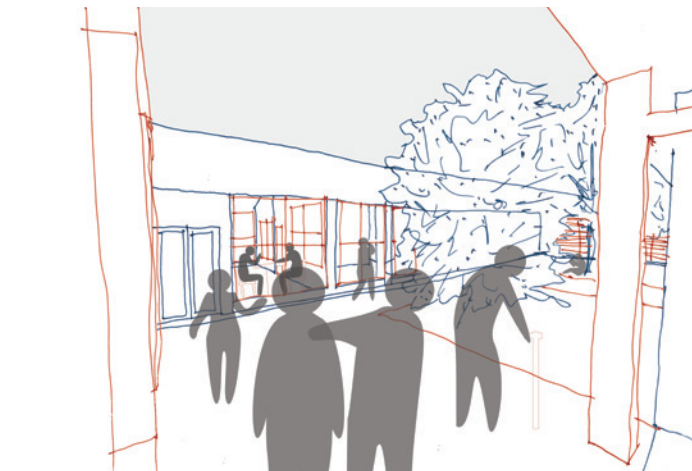




View 6 - Atrium



View 5 - Bridge between art room and music building



View 4 - Police admin open plan offices and public courtyard

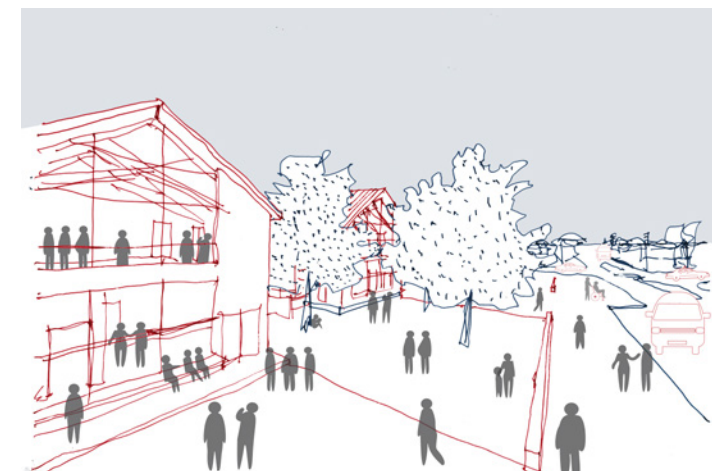
View 3 - Police service desk;  
divided into document  
certification, crime reporting  
and traumatic crime reporting



View 2 - Pre-waiting area for  
Police and counselling office



View 1 - Public approach



# REFERENCES

## BIBLIOGRAPHY

- atelier d'architecture autogere. n.d. Le 56 / Eco-interstice. Accessed July 24, 2017. <http://www.urbantactics.org/projects/passage%2056/passage56html.html>.
- Bayley, David H. 1994. *Police for the Future*. Oxford: Oxford University Press.
- Broadbent, Geoffrey. 1996. "A Plain Man's Guide to the Theory of Signs in Architecture." In *Theorizing a New Agenda for Architecture, an Anthology of Architectural Theory 1965-1995*, edited by Kate Nesbitt, p122-140. New York: Princeton Architectural Press.
- Faull, Andrew. 2017. *Police Work and Identity: A South African Ethnography*. Routledge.
- Foucault, Michel. 1994. *Power*. Edited by James Faubion. New York: The New Press.
- Government Communication and Information System . n.d. Thusong Service Centre. Accessed May 24, 2017. <http://www.thusong.gov.za>.
- Hamdi, Nabeel. 2010. *The Placemaker's Guide to Building Community*. London: Earthscan Ltd.
- Jacobs, Jane. 1961. *The Life and Death of Great American Cities*. New York: Random House.
- Krause, Michael , Chris Giles, Don Shay, Julian Cooke, Erald Smith , Iris Taani, and Udo Lange. 2017. *Violence Prevention Through Urban Upgrading - A manual for safety as a public good*. Edited by Julian Cooke. Cape Town: VPUU.
- Krause, Michael. 2013. "Breaking it Down to Build it Up." In *Handmade Urbanism - From CommunityInitiatives to Participatory Models*, by Marcos Rosa and Ute Weiland, p184-185. Berlin: Deutsche Nationalbibliothek.
- Kruger, Tinus, Karina Landman, Susan Liebermann, Lizette Lancaster, Antoinette Louw, and Rory Robertshaw. 2016. *Making South Africa Safe - A Manual for Community Based Crime Prevention*. 2. Pretoria: CSIR.
- Kruger, Tinus, Karina Landman, and Susan Liebermann. 2001. *Designing Safer Places - A Manual for Crime Prevention through Planning and Design*. Pretoria: South African Police Service and the CSIR.
- Leggett, Ted. 2003. "What do police do? - Performance measurement and the SAPS." ISS Paper 66: p1-14.
- Leggett, Ted. 2004. "Why Wait? - By-laws and Regulations for high impact crime prevention." *SA Crime Quarterly* 8: p11-16.
- Makena Design Lab. 2014. *Retreat SAPS Station*. 24 May. Accessed April 25, 2017. <http://www.makekadesigns.com/awards/cifa-merit-award-2007-south-african-railway-police-station-retreat>.
- Mokeka, Mokena, and Holger Deppe. 2012. "SAPS Retreat Railway Police Stations." In *The South African Informal City*, by Lone Poulsen and Melinda Silverman, p105-109. Johannesburg: The Architects' Collective.
- Mufamadi, Sydney. 1998. "Foreword." In *White Paper on Safety and Security, 1998*, by Department of Safety and Security, p2-4. Pretoria: Department of Safety and Security.
- National Planning Commission (NPC). 2012. *National Development Plan 2030 - Our future-make it work*. Pretoria: NPC.
- Newman, Oscar. 1972. *Defensible Space - People and Design in the Violent City*. New York: Architectural Press.
- Pikoli, Vusumzi (Vusi), and Catherine O'Regan. 2014. *Towards a Safer Khayelitsha*. Pretoria: Commission of Inquiry into Allegations of Police Inefficiency and a Breakdown in Relations between SAPS and the Community in Khayelitsha.
- Poulsen, Lone, and Melinda Silverman. 2012. *The South African Informal City*. Johannesburg: The Architects' Collective.
- Raitt, Remy. 2011. *Shifting Perceptions*. 23 September. Accessed July 24, 2017. <https://www.visi.co.za/shifting-perceptions/>.
- Stephan Brunner, Yasuhiko Machida and Ken Tadashi Oshima. 2006. "Policemen in a box." *Domus*. 3 February. Accessed May 5, 2017. <http://www.domusweb.it/it/architettura/2006/02/03/poliziotti-in-scatola.html>.
- Sustainable Livelihoods Foundation. 2016. *What we live with everyday is not right - Partnerships for accountability and safer cities in South Africa*. Edited by Kylie Thomas. Cape Town: Sustainable Livelihoods Foundation.
- The Constitutional Assembly. 1996. *Constitution for the Republic of South*. JUTA Law.



Application for Approval of Ethics in Research (EiR) Projects  
Faculty of Engineering and the Built Environment, University of Cape Town

## APPLICATION FORM

**Please Note:**

Any person planning to undertake research in the Faculty of Engineering and the Built Environment (EBE) at the University of Cape Town is required to complete this form **before** collecting or analysing data. The objective of submitting this application *prior* to embarking on research is to ensure that the highest ethical standards in research, conducted under the auspices of the EBE Faculty, are met. Please ensure that you have read, and understood the **EBE Ethics in Research Handbook** (available from the UCT EBE, Research Ethics website) prior to completing this application form: <http://www.ebe.uct.ac.za/usr/ebe/research/ethics.pdf>

APPLICANT'S DETAILS		
Name of principal researcher, student or external applicant		Andre le Roux
Department		Architecture, Planning and Geomatics
Preferred email address of applicant:		Andremetalman55@gmail.com
If a Student	Your Degree: e.g., MSc, PhD, etc.,	M.Arch
	Name of Supervisor (if supervised):	Fady Isaacs
If this is a research contract, indicate the source of funding/sponsorship		Click here to enter text.
Project Title		Approaching Guardianship

**I hereby undertake to carry out my research in such a way that:**

- there is no apparent legal objection to the nature or the method of research; and
- the research will not compromise staff or students or the other responsibilities of the University;
- the stated objective will be achieved, and the findings will have a high degree of validity;
- limitations and alternative interpretations will be considered;
- the findings could be subject to peer review and publicly available; and
- I will comply with the conventions of copyright and avoid any practice that would constitute plagiarism.

SIGNED BY	Full name	Signature	Date
Principal Researcher/ Student/External applicant	Andre le Roux		24 Jul 2017

APPLICATION APPROVED BY	Full name	Signature	Date
Supervisor (where applicable)	Fady Isaacs		24.07.2017
HOD (or delegated nominee) Final authority for all applicants who have answered NO to all questions in Section 1; and for all Undergraduate research (Including Honours).			
Chair : Faculty EIR Committee For applicants other than undergraduate students who have answered YES to any of the above questions.			